



Department of
Agriculture and Food



Landholder Information for the Safe Use and Management of 1080.



Department of
Agriculture and Food





Department of Agriculture and Food



Copies of this publication can be obtained by contacting your local Biosecurity Officer at the Department of Agriculture and Food Western Australia (DAFWA). To find your nearest DAFWA office, contact:

Department of Agriculture and Food Western Australia

Physical Address: 3 Baron-Hay Court, South Perth Western Australia 6151, AUSTRALIA

Postal Address: Locked Bag 4, Bentley Delivery Centre WA 6983

Phone: 08 9368 3333 Fax: 08 9367 7389 Website: www.agric.wa.gov.au

Authors: Biosecurity Training Unit, Department of Agriculture and Food Western Australia.
Renée Donovan, David Goodall, David Lund, Anita Wyntje

© State of Western Australia 2007

Except where the Copyright Act otherwise allows, this publication may not be reproduced in whole or in part without the prior permission of the copyright holder. Application for permission should be addressed to the Director, Information and Knowledge Management, Department of Agriculture and Food, Western Australia, Locked Bag 4, Bentley Delivery Centre WA 6983.

V1 0711 V2 0906 V3 0510 V4 1010

Disclaimer

The Department of Agriculture and Food makes this material available on the understanding that users exercise their own skill and care with respect to its use. Before relying on the material in any important matter, users should carefully evaluate the accuracy, completeness and relevance of the information for their purposes and should obtain appropriate professional advice relevant to their particular circumstances.

Changes in circumstances after the printing of this document may impact on the accuracy of the information.

In no event shall the Department of Agriculture and Food or the State of Western Australia be liable for any incident or consequential damages resulting from use of this material.

TABLE OF CONTENTS

Section 1

Introduction.....	2
Overview.....	3
1080 is Regulated Under Legislation.....	3
Natural Occurrence Of 1080.....	3
Properties Of 1080.....	4
Mode of Action Of 1080.....	4
Biodegradation Of 1080.....	4
Sensitivity of Animals To 1080.....	5

Section 2

Personal Safety.....	6
First Aid.....	7

Section 3

12 Steps to Conducting a 1080 Baiting Program.....	8
--	---

Section 4

Important Points to Remember.....	17
Important Final Words.....	17

Appendices

A: Self Assessment Questions.....	19
B-E: Farmnotes.....	21
F: 1080 Publications & Further Reading.....	35
G: 1080 Baiting Application Form.....	37
H: Template Letters for Notifying Neighbours of Intention to Use 1080.....	39

INTRODUCTION

This manual outlines your roles and responsibilities for using and managing 1080. In particular this manual outlines the essential information you need to know in regard to:

- The legislative requirements for 1080 use in Western Australia
- The properties and mode of action of 1080
- How to lodge an application to lay 1080 baits
- How to safely store and transport 1080
- The procedures and notification required to carry out a baiting proposal
- Personal safety, identifying signs of poisoning & effecting appropriate first aid treatment
- Your responsibilities for notifying DAFWA and the Police of any accidents or incidents
- Methods for evaluating the success of a baiting program

Before you will be given approval to conduct a 1080 baiting program, you must demonstrate to your Biosecurity Officer that you understand how to use and manage 1080 safely.

You can demonstrate your knowledge by completing a short, open-book assessment provided by your Biosecurity Officer. The assessment questions will be based on the information contained in this manual (excluding the Appendices).

Once your Biosecurity Officer is satisfied that you know how to use and manage 1080 safely, your 1080 Baiting Application can be processed and, subject to a complete Risk Assessment, approved.

OVERVIEW

1080 (also known as sodium fluoroacetate) is a highly poisonous substance that is used to control agricultural and environmental pests.

Legislation restricts the use of 1080. Misuse of 1080 endangers you, your family, your pets, the public, farm animals and wildlife and may impact on the future availability of this poison as a pest control method.

1080 was introduced to Australian rabbit control programs in the early 1950s. Since then it has been adopted to control many other declared species including foxes, wild dogs and feral pigs.

1080 has a long history of proven safety in Australia and New Zealand. In Western Australia there have been few reports of problems with human safety, environmental persistence and accumulation in the food chain, or adverse impact on populations of non-target species.

In many instances, 1080-based control programs are the only viable strategies available for broadacre control of vertebrate pests and with well-planned and applied baiting programs, rapid, high-level population knockdown can be achieved.

1080 IS REGULATED UNDER LEGISLATION

1080 use in Australia is closely regulated by Commonwealth and State government agencies. *The Poisons Act 1964* and associated *Poisons Regulations 1965* are the primary legislation that covers the manufacture, sale, use and possession of 1080 in Western Australia.

Poisons (Section 24) (Registered Pesticide 1080) Notice 2000 restricts 1080 as a Schedule 7 poison and is therefore only available from retailers licensed to sell Schedule 7 poison products.

The Code of Practice on the Safe Use and Management of 1080 provides the intent of the legislation and elaborates on the procedures for training and handling of 1080 products. A full copy of the Code of Practice should be supplied with this manual. If not, please ask your Biosecurity Officer for a copy.

The use of vertebrate pesticides in Western Australia must be in strict accordance with the Directions for Use supplied with each product.

NATURAL OCCURRENCE OF 1080

Although the 1080 compound used in baits is synthetic, 1080 does occur naturally in some toxic plants of Australia, South Africa, and South America.

There are about 40 plant species containing 1080 found in Australia. Most of these belong to the genus *Gastrolobium* and most are restricted to the **south-west of Western Australia**.

PROPERTIES OF 1080

- 1080 is highly soluble in water
- 1080 is generally odourless and tasteless to humans
- 1080 is stable under normal conditions, but starts to break down at temperatures above 110 degrees Celsius.

1080 baits that are exposed to rain can become non-toxic. Therefore baiting programs should be suspended during periods of wet weather.

MODE OF ACTION OF 1080

1080 can be absorbed into the body through:

- ① The gastrointestinal tract
- ① Mucous membranes of mouth & throat
- ① Open wounds
- ① The lining of the lungs

Once absorbed into the body, 1080 acts by interfering with the major biological pathway for releasing energy from food (i.e. the TCA cycle). As a result, the brain and nervous system function is compromised and **death usually results from heart and / or nervous system failure.**

Animals receiving small sub-lethal doses of 1080 may show mild signs of poisoning, metabolise and excrete the 1080 within one to three days, and then recover.

There is a lag from the time that 1080 enters the body to the appearance of signs of toxicity. In mammals, this lag-time is generally between 0.5 and 3 hours.

BIODEGRADATION OF 1080

Being highly water soluble, 1080 is readily leached from baits into the soil in the presence of rain or even heavy dew. Upon contact with soil a number of fungi and bacteria degrade 1080 into harmless by-products, **preventing 1080 from accumulating in or contaminating the environment.**

Because most 1080 is eliminated from living animals within three days, if an animal ingests a sub-lethal dose of 1080, toxin residues will not persist in meat, blood, the liver, or fat. This is in contrast to most anticoagulants (e.g. brodifacoum, bromadiolone) and many other pesticides.

Loss and degradation of 1080 from baits and carcasses is mainly dependent upon leaching, and the action of micro-organisms.

In general, meat baits are usually more impervious to water than are grain-based 1080 products.

SENSITIVITY OF ANIMALS TO 1080

There is a wide variation in the sensitivity of the different animal groups (Families) to 1080 because:

- ① animal groups convert 1080 to fluorocitrate at different rates
- ① the effect of the fluorocitrate produced varies between groups

Canids (dogs and foxes) are among the most sensitive; herbivores and birds are less sensitive, and reptiles and amphibians are relatively insensitive to 1080.

Fish and other aquatic fauna (including many invertebrates) are relatively resistant to 1080, and lethal concentrations would not be achieved even under intensive, standard aerial baiting programs. Also, 1080 is removed from baits fairly rapidly under moist conditions through leaching and microbial action.

The toxicity of 1080 can increase when animals are exposed to temperatures outside of their normal body temperature range.

1080 can have a chronic effect (i.e. effects caused from a sub-lethal dose) on a number of species, such as a **temporary reduction in their fertility**. It does not cause genetic changes to organisms.

Sensitivity of native animals

Many native animals in Western Australia are quite tolerant to 1080 because they have coevolved with 1080-bearing plants. These animals can generally eat some plants or animals containing 1080 with little risk of being poisoned. The same species of animals in south-eastern Australia, where the toxic plants do not occur, are generally much more sensitive to 1080.

Sensitivity of introduced animals

Vertebrate pests such as wild dogs, foxes, rabbits, feral cats, feral pigs and goats are introduced species and consequently, all have higher levels of sensitivity to 1080 than the adapted native species from Western Australia. This makes 1080 a particularly useful and target specific toxin in this state.

Sensitivity of pets and livestock

Most pets and domestic stock are also introduced species and most are highly sensitive to 1080, so they are susceptible to 1080 baits. Livestock are at risk of death if they feed on the bait trails of 1080 oats used to control rabbits or if they consume recently poisoned carcasses.

Dogs are at risk from both eating baits and through secondary poisoning. **Secondary poisoning** occurs when animals feed on poisoned carcasses (such as rabbits killed by 1080 baits). Such carcasses may remain toxic until they decompose. This poses little risk to native fauna, due to their enhanced tolerance to 1080.

One advantage of secondary poisoning is that foxes and wild dogs can be killed by feeding on rabbits that have been poisoned by 1080.

PERSONAL SAFETY

IMPORTANT!

- ① **1080 is extremely toxic to humans and there is no effective antidote!**
- ① **Less than 0.35 grams of pure 1080 has the potential to kill most adults.**
- ① **A complete commitment to the safe use of 1080 is essential.**

Personal Protective Equipment

The protective equipment required may differ according to the 1080 product you are handling. Refer to the Directions for Use for further information. As a guide, when handling dry formulations of 1080 (e.g. dried meat baits, oat bait) you should wear;

- ① Chemically impervious gloves (e.g. PVC or Nitrile)
- ① Protective clothing (e.g. Overalls)
- ① Glasses or Goggles (for oat dust)

PVC or Nitrile gloves offer the best protection. Under no circumstances should household rubber gloves, leather gloves or cloth gloves be used as these types of gloves are not impervious to chemicals, and may absorb or accumulate the poison over time. Eye-wear can be used to reduce irritation from oat dust if necessary.



Additional Precautions

Water should always be available whenever 1080 is being used. It can be used to wash down anyone that comes into contact with 1080 and for cleaning up after bait preparation and laying.

You must not eat, drink or smoke whilst 1080 is being handled.

Once you have finished handling or laying baits you should:

- ① Thoroughly wash all equipment and surfaces
- ① Remove protective clothing and wash (separately from other clothes)
- ① Wash hands thoroughly with soap and water



FIRST AID

Recognise the Symptoms of 1080 Poisoning

Recognising the signs of poisoning early can increase the chances of surviving 1080 poisoning. Symptoms include:

- ① Intermittent convulsions
- ① Increased sensitivity to external stimuli (e.g. noise)
- ① Irregular heartbeat
- ① Nausea & I or Vomiting
- ① Failure to recognise people or familiar objects
- ① Shaking

First Aid for 1080 Poisoning

A careful rapid response to suspected 1080 poisoning is essential to enhance the patient's chances of survival.

IF POISONING OCCURS IMMEDIATELY:

- ① **Call 000 to request an Ambulance**
- ① **Call 13 11 26 for Poisons Information to obtain the current first aid advice**
- ① Remove any contaminated clothing from the patient
- ① Wash any effected skin thoroughly through free flowing clean water
- ① Do not induce vomiting (risk of choking)
- ① Do not administer anything by mouth (risk of choking)
- ① Place the patient into the recovery position to maintain their airway
- ① If the patient stops breathing only administer resuscitation if you can ensure that there is no risk to the rescuer of ingesting the poison from the patient, (e.g. through mouth to mouth contact). A suitable barrier mask should be used if applying resuscitation. Be aware that the patient may have involuntary muscle contractions.
- ① Reassure the patient and keep them calm
- ① Wait for medical staff to arrive or if this is not possible take patient to doctor/hospital as soon as possible
- ① Make sure the 1080 product container, product 'Directions for Use', and Material Safety Data Sheet (MSDS) are available to medical staff

12 STEPS TO CONDUCTING A 1080 BAITING PROGRAM

Step 1: Discuss control options with your Biosecurity Officer

1080 can be a very effective control method for rabbits, foxes, wild dogs and feral pigs. Alternative methods of control are available depending on the target species. Although not always suitable, alternative control methods may include:

- ① ripping of warrens I dens
- ① trapping
- ① shooting
- ① fencing
- ① fumigation



Your Biosecurity Officer can help you to develop an effective control strategy using one or more of these methods – often **an integrated approach is most effective**, particularly when you include your neighbours in a broad-scale baiting program.

Community Baiting:

Your Biosecurity Officer can help you to implement a community program by organising neighbouring properties to undertake control programs at the same time. This combined effort can often achieve a significant reduction in the target species and a longer-term effect.

Step 2: Demonstrate a thorough knowledge of using & managing 1080 products

Before you will be given approval to use 1080 baits, your Biosecurity Officer must be satisfied that you have adequate knowledge for the safe use and handling of 1080.

You can demonstrate your knowledge to your DAFWA Biosecurity Officer by completing a **20-question open-book assessment**. All of the answers to the assessment can be found in the first 17 pages of this manual. You may like to test your own knowledge beforehand by attempting the **self-assessment** found in Appendix A of this manual.

Step 3: Submit a 1080 Risk Assessment Application & map for the specific baiting you wish to conduct.

A 1080 Risk Assessment Application and map must be submitted before any baiting program takes place. **The 1080 Risk Assessment Application and Product Request Form can be found at the back of this manual.** The information that you will be required to provide includes:

- ① Target species
- ① Type and quantity of 1080 baits – speak to your local Biosecurity Officer and / or your S7 retailer for advice on the various products available.
- ① Person/s receiving and / or laying the baits - All must demonstrate a thorough knowledge of using and managing 1080 safely
- ① Proposed start and end date of intended baiting program

Once your application form is submitted, the Biosecurity Officer will conduct a Risk Assessment to assess if it is safe (i.e. a manageable risk) to use 1080 in the proposed areas.

The Biosecurity Officer may impose additional conditions such as erecting additional signage or not baiting close to areas that are frequented by the public.

If your baiting application is approved, the Biosecurity Officer will issue you with a copy of the 1080 Baiting Risk Assessment and Approval Form. This form will outline the approved baiting period and any additional baiting conditions and restrictions. The Biosecurity Officer will also issue a **1080 Authorisation Voucher**.

Refer to the Farmnotes (in the Appendices of this manual) for specific information on using 1080 to control Rabbits, Foxes, Wild Dogs or Feral Pigs. Contact your Biosecurity officer if you need more information.

NOTE: The August 2010 Code of Practice contains provision for a Risk Assessment and Approval to remain valid for up to five years, provided there are no changes to the property that affect the level of risk. **IT IS THE RESPONSIBILITY OF THE APPLICANT TO ADVISE THEIR LOCAL BIOSECURITY OFFICER OF ANY SUCH CHANGES.**

The issue of 1080 remains restricted and still requires a voucher. During the time an approval is valid, you must advise your Biosecurity Officer when you need more products using the Product Request Form in order for them to issue the necessary voucher.

A Checklist for Producing a Map of your Proposed 1080 baiting program

You must submit a map of your proposed 1080 baiting program with your application form. Any of the following formats will be acceptable:

- ① Hand drawn map
- ① Computer digitised map
- ① Aerial photograph (with labeled features)

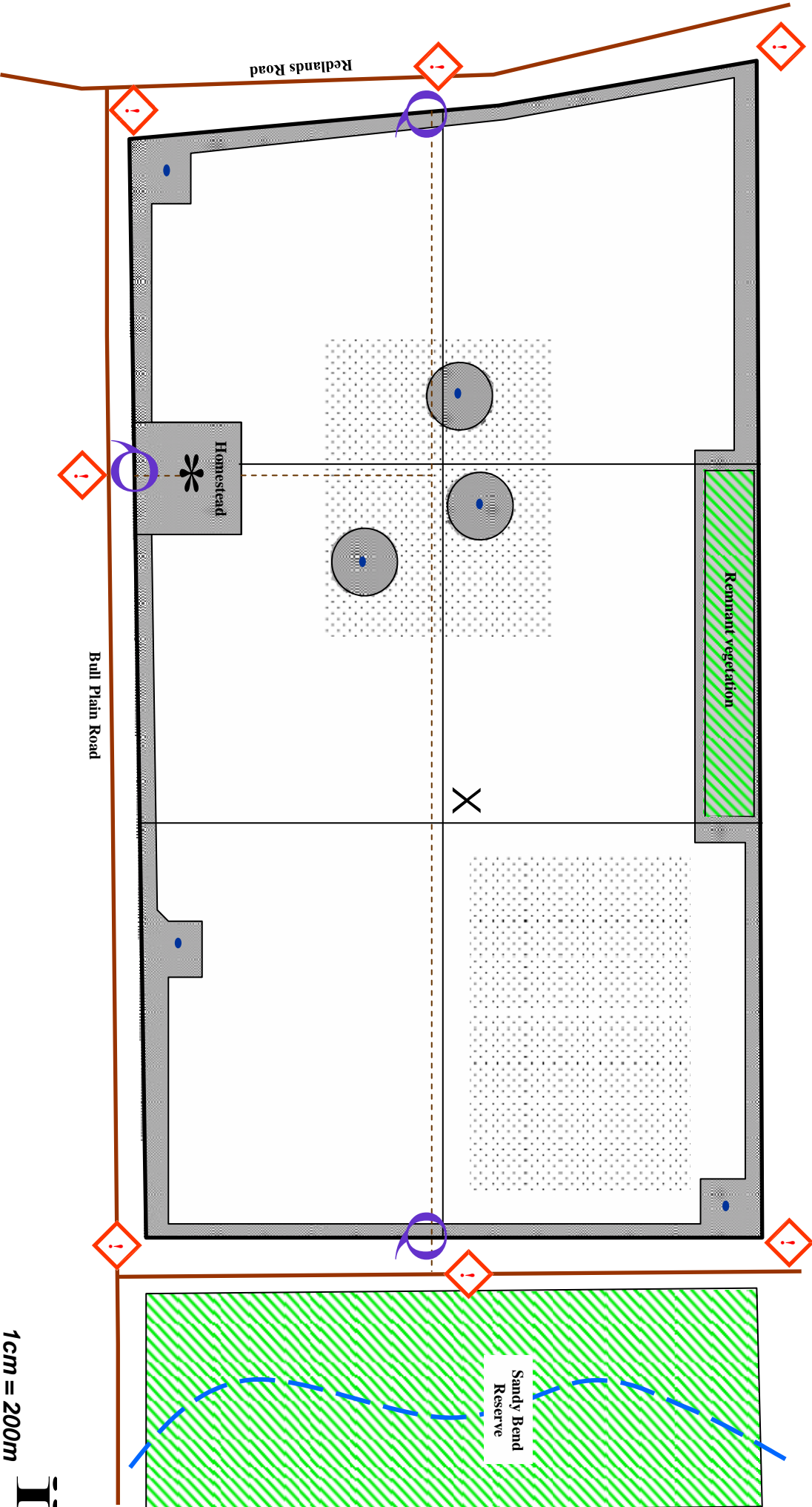
Your map must clearly show the following features:

- ☐ **Proposed Location of Bait Exclusion Zones.**
All areas **not to be baited**, including areas posing a potential risk to human and non-target species poisoning must be clearly identified as **Bait Exclusion Zones** (e.g. around buildings, bush remnants and water courses etc). Always refer to product 'Directions for Use' for restrictions. It is also sound management practice to identify on your map the general area where baits are likely to be laid.
- ☐ **Roads & Tracks.**
Include the tracks used to access baiting sites.
- ☐ **Location of Dwellings.**
Mark the location of dwellings on your property and those on adjacent properties.
- ☐ **Constructed Recreational Sites.**
- ☐ **Water Bodies and Water Courses.**
- ☐ **Proposed location of Warning Signs.**
Mark on your map where you propose to place your warning signs. They must be erected at entrances and other strategic points.
- ☐ **Property Access Points and Boundaries.**
Include those used for public use and management use.
- ☐ **Disposal Site.**
Indicate the location where poisoned animals, used 1080 containers and excess baits are to be buried or burned.
- ☐ **Significant areas of Bush I Scrub.**
- ☐ **Map Scale.**
Include a map scale or estimate the distance between the baits and bush areas, dwellings, recreational areas, water bodies etc.

See next page for a sample map.

PJ Smith Pastoral Co - Proposed 1080 Baiting Program - August 2007

- Legend:**
- Bait Exclusion Zone
 - Area likely to be baited
 - Bush Areas
 - Roads
 - Internal tracks
 - Water Courses
 - Water bodies
 - Access Points
 - Dwellings
 - Warning Signs
 - Disposal Site



Placement of Baits - Bait Exclusion Zones

To help manage the potential risk of poisoning non-target species, including humans, domestic pets, livestock and native animals **there are distance restrictions for the placement of 1080 baits.**

The **Directions for Use** supplied with the 1080 product will clearly explain the minimum distances that baits are allowed to be placed away from:

- Property boundaries
- Constructed Recreational sites
- Dwellings
- Gazetted Public Roads
- Permanent or flowing water bodies

The distance restrictions that apply may vary according to the type of bait being used (e.g. meat baits I grain baits) and the method of baiting (e.g. aerial or ground baiting).

The Directions for Use will also stipulate how long the baits should be left undisturbed (if applicable) and how many days of fine weather should be forecast for the baiting period - as rain can reduce the effectiveness of the baits.

Your Biosecurity officer may impose additional restrictions on your baiting program. These additional conditions will be clearly set out on the **1080 Baiting Risk Assessment and Approval Form supplied by your Biosecurity Officer.** An example may be “No baits are to be laid within 50 m of the boundary fence adjacent to the Public Golf Course.”

You must be authorised to use 1080. Unauthorised possession is an offence.

The Directions for Use supplied with your 1080 product and the 1080 Baiting Risk Assessment and Approval Form will clearly outline the restrictions and conditions for your baiting program.

It is an offence for anyone to use 1080 products contrary to instructions given on these documents unless authorised in writing by the Director General (or delegated officer) of an Authorised Department.

1080 in Water Catchments

The laying of baits in water catchments is subject to the legislation and restrictions that protect Public Drinking Water Source Areas (PDWSA). PDWSA are categorised as P1, P2 or P3. Reservoir Protection Zones (RPZs) are also protected under legislation, which is designed to protect water sources from contamination by preventing access.

The restrictions are summarised as follows:

Reservoir Protection Zone (RPZ)	no baiting within 2km of the top water level of a reservoir
P1 PDWSA	no baiting within 500m of a bore / wellhead
P2 PDWSA	no baiting within 300m of a bore / wellhead
P3 PDWSA	no baiting within 300m of a bore / wellhead

The current PDWSA are identified in the Water Authority's WQPN75, and maps of PDWSA are available online at www.water.wa.gov.au.

Step 4: Take your Authorisation Voucher to your S7 retailer to purchase specified baits.

The 1080 Authorisation Voucher will nominate the person that is to pick up the bait from the S7 retailer. This person must provide identification to the retailer.

1080 AUTHORISATION VOUCHER		Nº 28272
DATE:	<u>2nd February 2007</u>	Risk Assessment No: <u>FRF 0 43051</u>
APPLICANT:	<u>Boyd Landholder</u>	
ADDRESS:	<u>RMB 51 Wright Road</u> <u>Margaret River, WA</u> Postcode: <u>6225</u>	
PERSON PICKING UP BAIT:	<u>Boyd Landholder</u>	
	1) Must be the same person nominated on the Risk Assessment form	
	2) Must be an approved (trained) person	
Bait type:	<u>1080 Fox Baits</u>	Concentration: <u>3 mg</u> Quantity: <u>12 or less</u>
Approving Officer: (print)	<u>G. Inspector</u>	Agency: <u>DAFWA</u>
Signature:	<u>G. Inspector</u>	Voucher expiry date: <u>15/2/2007</u>

It is an offence for someone other than the person nominated on the voucher to purchase or pick up baits from the S7 retailer.

Step 5: Transport and Store 1080 in Accordance with the Code of Practice

Transport

The transport requirements of 1080 products include:

- 1080 products must be transported in a locked container in a secured part of the vehicle.
- 1080 must never be transported with foodstuffs
- vehicles carrying baits should not be left unattended
- domestic animals should be segregated from the baits
- 1080 should be segregated from any passengers and the driver of the vehicle



Carrying baits in a small locked toolbox inside an anchored and locked tool-chest of a utility would be ideal transportation method.

Storage

1080 products must be always **stored in their original packaging in a double locked container** except when they are required for immediate use. 1080 products must always be kept in areas inaccessible to the public and must not be stored with foodstuffs.

Depending on the 1080 product, the following types of storage can be used:

- Designated, marked poison cupboard
- Locked freezer
- Chained and padlocked in a locked security store
- Locked cupboard

All storage areas must comply with the Dangerous Goods Regulations for storage safety, security and warning signs. Material Safety Data Sheets (MSDS) are also required to be kept with all poisons stored.

Step 6: Give all neighbours at least 72 hours notice in writing and erect warning signs prior to laying baits.

Notify Your Neighbours

It is an offence to lay baits without giving neighbouring properties at least 72 hours prior notice (but not more than 14 days notice). This notice must be given in writing or other method as approved by the Commissioner of Health.

Notification must inform the recipient of the following:

- ① Period of baiting
- ① Address of property where baits are to be laid
- ① Type of bait intended to be used
- ① Information on the hazards associated with 1080 baiting. (i.e. potential risks to humans, livestock and domestic animals)

We recommend the use of the template letter at the back of this manual to notify your neighbours of your intention to use 1080 baits.

Erect Warning Signs

Prominent warning signs, alerting the public that 1080 baiting is taking place, must be displayed during the baiting period and for at least **one month afterwards**.

The warning signs must be erected on the property being baited at entrances and other strategic points, (e.g. vicinity of the baits and fence posts) as per the Directions for Use.

Signs must be at least 200mm x 200 mm with red lettering on a white background. Your Biosecurity Officer should be able to supply you with the required warning signs once your application has been approved.



Step 7: Restrain pets, exclude un-authorized persons & livestock

Throughout the baiting process you must ensure that any un-authorized people (e.g. children) are not able to gain access to the baits.

Ensure that pets are restrained and ensure that livestock do not have access to the baited area and I or the baits. Exclusion fences can be used to keep livestock away from grain bait in bait stations.



Step 8: Prepare and lay baits by following the Directions for Use supplied with the product and any additional conditions given by your Biosecurity Officer.

It is an offence to use a 1080 product contrary to the product label and the Directions for Use. You must also comply with any additional instructions given by your Biosecurity Officer.

The Directions for Use will include information on:

- ① The appropriate personal protective equipment that must be worn
- ① The rate of lay to be used
- ① Methods of laying bait
- ① Bait placement and location (including restrictions)
- ① Disposal of carcasses, un-used products, used containers



Hints for reducing potential risks to non-target species

- ① Where suitable, lightly covering dried meat baits with soil or tethering baits may help to prevent birds or other non-target species from finding, consuming or moving baits.
- ① Where possible, time baiting outside of native animals breeding seasons or during periods of food shortage.
- ① Do not lay oat baits in bush or close to native vegetation remnants.
- ① Consider using Scatter-baiting to make the grain baits less visible and more difficult for native animals to find and consume.
- ① When water birds are present, do not lay grain baits near dams or water courses, or their feeding areas.
- ① Minimise the potential risk of secondary poisoning of non-target animals by disposing of poisoned carcasses on a regular basis during baiting programs.

Step 9: Replace baits and dispose of poisoned carcasses throughout the baiting period

In some cases (e.g. for fox baiting) it may be advisable not to lay out all baits at once. Where practical, the baited area should be checked every day and any baits that have been taken should be replaced. This allows you to place the baits in the areas that are most likely to be taken. Carcasses of 1080 poisoned animals are often difficult to find, but any that are found must be disposed of as specified on the Directions for Use (e.g. burial or burning).



Step 10: Complete baiting program.

It is an offence to bait outside of the approved baiting period.

Ensure the baiting is completed by the completion date stated on the 1080 Risk Assessment and Approval form (supplied by your Biosecurity Officer). If you do not think you can complete baiting by the end date you must speak to your Biosecurity Officer to arrange an extension. Check for any poisoned carcasses for 14 days after the completion of baiting.

Step 11: Dispose of un-used 1080 poison and used containers.

Un-used baits must be disposed of at the completion of the baiting program. It is an offence to keep baits for future use. It is an offence to sell or give baits to any other person.

The directions for use will explain how to dispose of un-used baits, carcasses and used containers (usually through deep-burial or burning). The directions for use will also stipulate how to manage baits that have already been laid, but not eaten (e.g. covering oat trails, collecting dried meat baits for burning or burial).

Step 12: Evaluate the success of the baiting program.

It is important to ascertain the effectiveness of the baiting program. The evaluation should determine the effect on the target species population (including damage caused by the target species) as well as any effect on non-target species.

Animals killed by 1080 are not usually found. This is because of the relatively long lag time between consumption of bait material and the onset of signs of poisoning. Failure to find any carcasses does not mean that the baiting has not been effective.

Methods of evaluation may include:

- ① Evaluation of the number of baits taken
- ① Reduction in damage caused by the target (e.g. lambs killed)
- ① Reduction in the numbers of the target animal seen
- ① Reductions in signs of the target animals (e.g. digging, footprints etc)
- ① Increased activity or density of native fauna

IMPORTANT POINTS TO REMEMBER

Report any 1080 accidents and incidents immediately!

You must report any accidents or incidents to the **Department of Agriculture and Food**. Where human safety is at risk, the accident or incident must also be reported to the **Police**. Accidents or incidents include (but are not limited to):

- Spillage of 1080
- Human exposure to 1080 and poisoning
- Application contrary to Risk Assessment conditions set by Biosecurity Officer
- Theft or loss of 1080 products
- Poisoning of non-target species

Remember:

- **There is no effective antidote for 1080.**
- Take every precaution to avoid ingesting 1080 products.
- Follow all recommended safety procedures for 1080 products.
- Assess the potential risk to non-target species prior to baiting.
- Inform your adjacent neighbours in writing prior to baiting.
- Adhere to all baiting restrictions and conditions given by the Directions for Use and DAFWA.
- Do not lay baits outside of the designated area.
- Erect appropriate warning signs and leave in place for 1 month after baiting.
- Do not allow stock to eat 1080 products.
- Do not allow domestic dogs to eat dried meat baits or carcasses poisoned with 1080.
- Dispose of all un-used baits, poisoned carcasses (if any are found) and product containers.
- Do not sell or transfer 1080 products to any person.
- Do not store any 1080 product beyond the designated baiting period.
- Learn how to apply first aid in case of 1080 poisoning.
- Report any accidents or incidents involving 1080 products.

IMPORTANT FINAL WORDS

If used properly, 1080 is a safe, efficient, effective and humane way of controlling rabbits, foxes, wild dogs and feral pigs. However, you need to ensure that you use 1080 products in strict accordance with the Directions for Use and the Code of Practice for the Safe Use and Management of 1080 so that 1080 products continue to be available in the future.

Do not take your responsibility lightly. You must take every precaution to ensure that the baits are used safely and do not end up in the wrong place or in the wrong hands.

The continued availability of 1080 as a control method for animal pests is vitally important for the agricultural and pastoral industries and for maintaining our unique biodiversity in Western Australia.

APPENDICES

A: Self Assessment Questions

B: Landholder Use of 1080 One Shot Rabbit Bait

C: Fox Baiting

D: Wild Dog Control

E: Feral Pigs and 1080 - What You Need To Know

F: 1080 Publications and Further Reading

G: 1080 Baiting Application Form

H: Template letters for notifying neighbours of intention to use 1080.

APPENDIX A: SELF ASSESSMENT QUESTIONS

To help you to prepare for the official assessment, you may wish to attempt the following questions. The questions are based on the information provided in this booklet (excluding the appendices). The answers can

When you are ready, contact your Biosecurity Officer and they will arrange for you to complete the final assessment. Remember the final assessment will be an **open-book format**. It will be comprised of 20 multiple choice, true I false and short answer questions similar to those below:

1. In general, which animal group is most sensitive to poisoning from 1080?

- a) Native Animals in Western Australia
- b) Introduced Species (e.g. Rabbits, Foxes, Wild Dogs)

2. 1080 is degraded in the environment by:

- a) 1080 is not degraded in the environment
- b) leaching and micro-organisms
- c) sunlight converting 1080 into a harmless substance
- d) long-term exposure to oxygen in the atmosphere

3. Is there an effective antidote for 1080 poisoning?

- a) Yes
- b) No

4. Gloves must be worn when handling 1080 baits. Which of these gloves would offer the best protection?

- a) Cloth gloves
- b) Leather gloves
- c) PVC gloves
- d) Household rubber gloves

5. What form must a landholder complete and submit to an authorised DAFWA officer for every baiting program in order to obtain 1080 products?

6. A community baiting program can often achieve a significant reduction in the target species and can have a longer-term effect than the effect achieved by an individual landholder.

- a) True
- b) False

7. Which two documents must be provided to S7 Retailers to enable a person to be supplied with 1080 bait products? (Circle two correct answers)

- a) Certificate of title proving their land ownership
- b) Proof of identity
- c) Original 1080 Authorisation Voucher naming the person picking up the baits
- d) National Police Clearance

8. Un-used 1080 baits may be given or sold to neighbouring property owners.

- a) True
- b) False

9. If a landholder believes they will have difficulties completing a 1080 baiting program by the approved program expiry date what action should they take?

- a) Ask an authorised DAFWA officer for an extended expiry date
- b) Try to get the baiting program completed as soon as possible after the approved expiry date
- c) Cease baiting on the expiry date and destroy all un-used bait and containers no matter what the circumstances were
- d) Keep baiting but later inform an authorised DAFWA officer the date you eventually completed the baiting program

10. Which authority (in addition to DAFWA) should be contacted immediately if any 1080 products are lost or stolen?

- a) Department of Environment and Conservation
- b) Department of Planning and Infrastructure
- c) WA Police Service
- d) Fire and Emergency Services Authority of WA

Answers : 1. b) 2. b) 3. b) 4. c) 5. 1080 Baiting Application Form 6. a) 7. b) c) 8. b) 9. a) 10. c)



Department of Agriculture

Farmnote

Landholder use of 1080 One-shot oat rabbit bait

Revised by Errol Kruger and staff of the Vertebrate Pest Research Section, Forrestfield

This Farmnote should be read in conjunction with Farmnote 'Safe Use of 1080 Poison'.

Status and management

In Western Australia, rabbits are declared pests in categories A1, A3 and A5 under the *Agriculture and Related Resources Protection Act 1976* and landholders are required to control them on their properties. All control activities must comply with requirements under the *Animal Welfare Act 2002* and *Animal Welfare (General) Regulations 2003*. It is an offence to release any declared pest back into the wild.

1080 is one of the most lethal pesticides known. So it is important to follow each of the steps below for your own safety, and to also ensure you get good rabbit control. Do not take any short cuts. There are two options for obtaining 1080 One-shot oats for rabbit control:

Purchase 'Ready-to-lay' oats from a S7 retailer, or

Contract a Licensed Pest Control Operator (LPCO), to prepare and lay your bait mixes.

The Department of Agriculture may also provide this service if the baiting program is part of a coordinated community control program. Purchasing and laying the Ready-to-lay oats is probably the most practical and cost effective option for most landholders.

Why use 1080 One-Shot oats?

Poisoning is the most cost-effective way to control large rabbit populations, and it can be used to target rabbits that survive outbreaks of rabbit haemorrhagic disease (RHD) or myxomatosis. However, the effectiveness of poisoning depends on correct timing and application.

1080 (sodium fluoroacetate) One-Shot oat bait, including the premix Ready-to-lay product, is laid directly without prior free-feeding. However, an extended period of at least 10 days without rainfall or heavy dew is required for effective rabbit control (see below). Baiting is also best undertaken when other food supplies are limited.

For the following reasons baiting is likely to be more successful if it is carried out during late summer (January to March):

Less feed is available, and so the bait may be more attractive. However, do not allow stock to graze off too much feed before the poisoning, because the rabbits may move their feeding areas to adjacent areas with better feed.

Rainfall is less likely within the baiting period. Even small amounts of rain can reduce the effectiveness of 1080 One-Shot oat baiting (see below).

It takes advantage of the extended feeding areas of the rabbits, which do not strictly maintain their territories during the non-breeding season. Because rabbits are moving further afield, more will find the bait.

A long-term reduction in rabbit numbers is more likely. Rabbit numbers are decreasing in late summer, and any further reduction before the main breeding period, which starts at the break of the season, will maximise the benefits of control programs.

Restrictions and precautions

Trained landholders can purchase bait products containing 1080 after they have obtained Baiting Approval from an authorised officer of the Department of Agriculture Western Australia. Only appropriately trained and licensed personnel (for example, LPCO, DAWA staff) can prepare bait mixes.

Steps for landholders

Farmnote 'Guide to the safe use of 1080 poison' details important precautions when using 1080, including:

- notification of your neighbours;
- erection of warning signs;
- careful use of 1080 in high risk areas;
- responsible security, storage and disposal of baits; and
- effective personal safety.

Important Disclaimer

The Chief Executive Officer of the Department of Agriculture and the State of Western Australia accept no liability whatsoever by reason of negligence or otherwise arising from the use or release of this information or any part of it.

For more information visit our web site www.agric.wa.gov.au

The keys to successful baiting

If you can poison more than 80 per cent of the rabbits, you have a greater chance of achieving a longer-term benefit. Target the difficult-to-poison rabbits with your baiting effort. This can be done by laying up to three parallel trails in areas of high rabbit density.

Whether you are using the 'ready-to-lay' product or you engage the services of a Licensed Pest Control Operator to mix and lay your bait using the 'One Shot' oats, the biggest effect on the success of rabbit baiting is how many rabbits can be tempted into feeding on the bait trail. The attractiveness of the oats as a food item is an important factor.

When using the 1080 'One Shot' method, remember that large, plump, fresh oats, free from any chemicals (for example, do not use 'pickled' grain), should be used. This will improve the chance of success. The total cost of the oats will be small compared to the potential rewards from a successful baiting campaign.

Trail placement – bush areas

When laying poison bait trails, you are targeting the feeding behaviour of rabbits. Where paddocks adjoin dense bush in which the rabbits are living, it is unlikely that any rabbits confine their feeding activities to the scrub area. The availability and the quality of the feed in the paddock is usually superior to that available in the bush and no advantage is gained by laying the first trail in adjacent dense bush.

Laying baits in bush areas may increase risks to any small native animals that are present and which, unlike rabbits, are likely to restrict their activities to the bush remnants.

The trails

Generally, the first trail should be placed close to, but not in, rabbit shelter areas so that they have to cross it to get to the feeding area in the paddock. This trail is important but it is not the one that will provide the main benefit. Additional trails should be placed in the rabbits' feeding areas in the paddock to pick up those individuals that ignore the first trail.

It is suggested that the first trail is placed about 10 to 20 m from the bush remnant and the second trail is placed about 40 to 50 m into the main feeding area of the rabbits, and so on. Bait-take should be monitored and the trails topped up as required.

Rabbit feeding areas are often difficult to identify, but likely places are open areas where the grass is short and where scratchings are common. There is often a distinct rabbit-graze line. Ideally, feeding areas and rabbit densities should be confirmed by spotlighting before the

trails are laid. During spotlighting it is important that the rabbits are not shot at or harassed. Baiting is also best avoided if myxomatosis or RHD are active. So, do not bait until about four weeks have elapsed from seeing evidence of either disease.

Widespread control

Widespread control efforts are usually more effective because pest animals are eliminated over a large area and the chances of re-infestation from adjoining areas is reduced. Therefore, coordinate your control efforts with your neighbours. Such an approach costs less over the long term, and enhances the productive use of scarce resources.

Bait laying instructions

All stock must be removed from the paddock before baiting begins.

You should bait only if at least five days (preferably 10 days) of dry conditions are expected. Damp soil or even heavy dew can affect the result. As little as 6 mm of rainfall can reduce the poison content of an oat to the point where it may no longer be toxic to the average adult rabbit. If rain occurs within 10 days of poisoning, re-baiting may be necessary because 1080 is washed out of bait by water.

If rain falls

Rainfall can affect 1080 baits in two ways:

1080 is water-soluble and can be leached from baits, and

the palatability of baits can be reduced.

If heavy dew or rain falls after baiting, the number of rabbits killed should be monitored for 10 days after the baits were laid. If the kill rate is lower than expected (that is, less than 60 per cent) re-baiting the area should be discussed with your local Department of Agriculture Biosecurity officer.

When to re-stock the baited paddock

Once the poisoning program has been completed, it is your responsibility as a landholder to determine whether or not it is safe to re-stock the paddock. Generally, unless substantial rain has fallen since the bait was laid, the bait trail must be covered with soil before the paddock is restocked.

Presentation of the bait and rate of lay

You may lay the bait as either a compact, narrow band with or without a furrow (furrow baiting and ribbon baiting) or as a broad swath of widely spaced grains (scatter baiting).

Furrow baiting

A shallow furrow, about 10 cm wide and 2 cm deep, is cut with a disc bait layer, and the bait is laid within this furrow. This type of trail is useful under normal pasture conditions. It gives the operator the opportunity to assess 'bait take' by the rabbits and allows the bait to be later buried. A rate of lay of 6 kg/km should be used. Care is required with this method so as to avoid creating soil erosion in some soil types as rain run-off may channel down the furrows.

Ribbon baiting

A narrow band of bait (preferably about 10 cm wide) is laid on the natural surface of the soil. The rate of lay is again 6 kg/km. This type of trail is useful where a furrow could cause erosion or cannot physically be cut. Ribbon baiting also gives the operator an opportunity to assess 'bait take' by the rabbits.

A shallow furrow (less than 2 cm) may be used as a marker when laying a ribbon trail but the oats are not laid in the furrow. Research has shown that a furrow is not required to attract rabbits, although you may find it a useful way to locate the position of the bait trail.

When laying a ribbon trail on loose sandy soils, it is better to lay the oats directly onto a fresh tyre track. This partially stabilised sand helps to prevent the oats becoming buried in windy conditions. If the area to be baited contains patches of loose sandy soil, you will usually get a better kill with a ribbon trail compared to furrow baiting.

Ribbon baiting does not require elaborate equipment to be successful. A watering can is suitable for this type of bait-laying. Determine the correct vehicle speed that will produce a rate of lay of 6 kg/km with a practice run with some unpoisoned oats, well away from the baiting area.

Scatter baiting

This method of poisoning is useful where other trails could cause erosion. The trail is laid so that most of the bait is spread over a width of about 5 m. Most scatter trails will have some oats out to a total width of 10 m and a higher concentration of oats near the centre. All oats should be well separated from each other. The typical spacing for oats near the centre of the trail would be about 15 cm (6 in) apart. A rate of lay of 10 to 12 kg/km should be used.

There are two methods commonly used to lay a scatter trail. The oats are either blown out in a continuous stream from a modified mister or similar unit or they are spread by a spinning disc in much the same way as fertiliser is distributed from a super-spreader.

If you are contemplating using a piece of machinery that is also used to lay other materials, it is vitally important that it is free from contaminants. If possible, thoroughly clean all components that will come in contact with the oats, both before and after baiting is undertaken.

After laying the bait

Leave both the bait and the rabbits undisturbed for at least 10 days. Monitor all control efforts and top-up bait trails if required at the recommended rate (6 kg/km for furrow and ribbon baiting and 10 to 12 kg/km for scatter baiting).

Other options

Conventional 1080 oats can also be used to control rabbits. However, this technique requires rabbits to be fed for several days with unpoisoned oats before the poison bait is laid. It differs from the One-Shot technique in that all oats contain a very small amount of 1080. Pindone (an anticoagulant) poisoned oats can also be used, but these are generally more expensive than 1080 products. Further, unless their use is well managed, pindone-oats may pose a greater potential risk to non-target species. Rabbit-proof fencing can be a viable option for small holdings.

Further information

For further advice and assistance in controlling rabbits, contact your local Department of Agriculture office.

See also Farmnotes:

Farmnote 89/2001 'Options for rabbit control'

Farmnote 63/2001 'Guide to the safe use of 1080 poison'

Farmnote 101/96 'Rabbit warren and harbourage destruction'

Farmnote 20/2004 'Fumigation for rabbit control'



Fox Baiting

By staff of the Vertebrate Pest Research Section, Forrestfield

Baiting with 1080 poison can be very effective in reducing fox numbers. Used with care, it can be safe for humans, non-target animals and the environment.

This farmnote gives instructions for using poison baits and outlines other ways of maximising the number of baits taken by foxes. It should be read in conjunction with farmnote 'Guide to the Safe Use of 1080 Poison' and registered product labels and Directions for Use.

1080 baits

Trained landholders can purchase bait products containing 1080 (sodium fluoroacetate) after they have obtained Baiting Approval from an authorised officer of the Department of Agriculture.

Farmnote 'Guide to the Safe use of 1080 Poison' details important precautions when using 1080, including:

- notification of your neighbours;
- erection of warning signs;
- careful use of 1080 in high risk areas;
- responsible security, storage and disposal of baits; and
- effective personal safety.

1080 poison

There is no antidote for 1080 poisoning.

1080 is a naturally occurring compound that is quickly broken down in the environment. Many native animals have developed a high degree of tolerance to 1080 while foxes (and domestic dogs and cats) are very sensitive to the poison.

Effective poisoning periods

The most effective fox control is achieved during late winter and spring. At this time food demands are high as



foxes are rearing young. Foxes are also less mobile and so reinfestation of baited areas can be delayed.

At other times (especially autumn) foxes are more mobile. Baiting will only temporarily reduce numbers, as new animals will move in to replace resident animals that have been killed. Consequently baiting may need to be repeated to achieve maximum control.

Community baiting drives

A district-wide campaign involving community groups can reduce the extent and speed of reinfestation as a large area is baited simultaneously. Such efforts are also more cost-effective. These baiting drives rely on co-operation amongst all landholders to achieve effective fox control.

How many baits?

The recommended bait density for Western Australia is five per km² (that is, 5 per 100 hectares). Research, in this State, has shown that at this rate at least 80 per cent of foxes should be killed but an increased bait density does not appear to increase the overall number of foxes killed. When areas of fox activity can be specifically targeted, fewer baits will be required.

Where to lay baits

Individual baits should be placed at least 200 m apart; otherwise one fox may find and eat more than one bait. Baits should be laid at strategic points (see map) including:

- where fox tracks are regularly seen;
- along water courses, tracks and at fencelines where foxes regularly travel;
- at prominent points within paddocks (jutting corners, rock piles, posts);
- under or near carcasses visited by foxes.

Important Disclaimer

The Chief Executive Officer of the Department of Agriculture and the State of Western Australia accept no liability whatsoever by reason of negligence or otherwise arising from the use or release of this information or any part of it.

Refer to Directions for Use to ensure that requirements such as distances from boundaries are met.

How to lay baits

The position of all baits should be marked with marker tape, pegs or something similar so they are easy to recover as required, at the end of the control campaign.

In areas where there are farms and reserves near closely settled areas, meat baits should be:

- buried about 10 to 20 mm below the soil surface to reduce the risk of poisoning non-target animals that seldom dig for baits, or
- tethered by a length of light wire or similar to prevent them being moved (for example, by birds).

In areas where there are typical rural properties with low numbers of people, meat baits can be buried, tethered or hidden under vegetation, rocks or fallen timber so that birds cannot see them.

In all areas, eggs baits should always be buried 20 to 100 mm below the soil surface to decrease hazards to non-target animals.

Improving the percentage of baits taken

- Individual baits should be available to foxes for about 10 days.
- Check baits at least every two days to assess 'take'.
- If a fox takes a bait, keep replacing it until no more are removed.
- Move uneaten baits to areas where others have been taken.

- Foxes more quickly locate baits laid on a scent trail that is broken between baits. Do not use a continuous scent trail as an individual fox can take many baits.

Baiting evaluation

Foxes poisoned with 1080 are seldom located. This can give the false impression that baiting is not effective. If baits are laid correctly, a count of the baits taken will give an indication of the number of foxes killed.

Further information

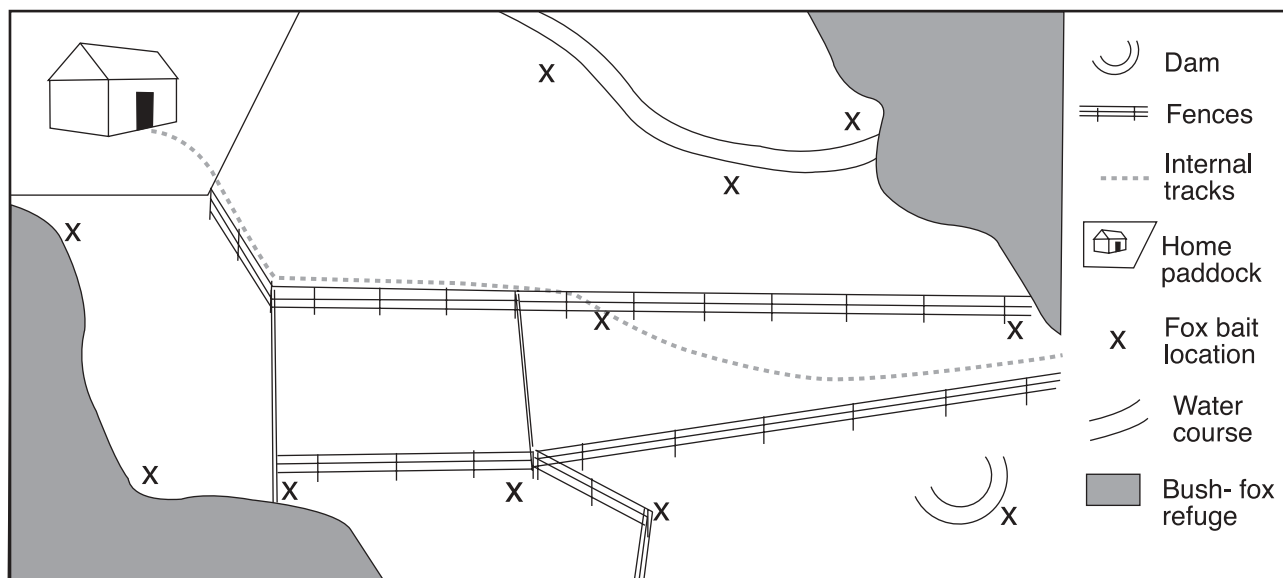
For further advice and assistance in controlling foxes, contact your local Department of Agriculture office, or the South Perth office on tel. 9368 3333.

There are a number of publications on fox control available from departmental offices or on the website.

Remember foxes and other animals, especially birds, can move baits, so follow the recommended procedures to minimise this risk.

Final checklist

- Warn your neighbours before baiting and put up warning signs.
- Keep dogs and cats restrained while baits are out.
- Retrieve all uneaten fox baits at the end of the control campaign.
- Dispose of leftover baits and containers appropriately.
- Wash your clothes and hands after handling baits.



Examples of appropriate locations for fox baits on a farming property.



Department of Agriculture

Reviewed
2008

Farmnote



Wild dog control

By Peter Thomson, Vertebrate Pest Research Section, Forrestfield.



Ewe killed by wild dogs.

General strategy

The aim of controlling wild dogs is to protect livestock from attacks and harassment. The approach used in sheep grazing areas is different from that in cattle areas. Sheep and wild dogs cannot co-exist and so a control strategy aimed at keeping sheep paddocks free of wild dogs must be adopted. In the absence of fences to exclude them, wild dogs must be controlled *before* they reach the sheep paddocks.

Buffer zone concept

Studies in Western Australia and the Eastern States have shown that only wild dogs living within or close to stocked paddocks are likely to pose a threat to livestock. Control work should concentrate on removing these wild dogs and creating a buffer zone free of wild dogs next to the stocked areas. Ideally, the buffer zone should extend to form an essentially continuous strip of country fronting the areas needing protection.

Wild dogs that disperse from their home ranges continue to move until they find suitable food, water and shelter in an area where they will not be harassed by territorial, resident animals. Where a dog-free buffer zone exists, dogs that have moved from beyond the buffer zone are likely to settle *before* they reach the sheep paddocks. Ongoing control in the buffer zone normally removes these immigrants before they have an opportunity to fully establish their own area and social group. If territorial resident animals are allowed to remain or settle in the buffer zone, their presence actually encourages other wandering individuals to keep moving in search of vacant territory. The residents do not create a barrier to movement, and in fact tend to force other individuals to continue to move, potentially into stocked areas. So to maintain paddocks free of wild dogs, it is important to keep numbers of wild dogs in the buffer zone as low as possible.

Important Disclaimer

The Chief Executive Officer of the Department of Agriculture and the State of Western Australia accept no liability whatsoever by reason of negligence or otherwise arising from the use or release of this information or any part of it.

For more information visit our web site www.agric.wa.gov.au

Buffer zone width and level of control

To make sure that adequate food and water are available to immigrating wild dogs, we recommend a buffer zone equal to the width of one to two territories. In the Pilbara, for example, this amounts to about 15 to 20 kilometres. The amount and distribution of water is an obvious factor that must be taken into account in establishing a suitable buffer zone in other areas. Widely spaced waters necessitate a wider zone than that appropriate for the Pilbara, for example, up to 35 kilometres on the Nullarbor.

Concentrating the control effort into well-defined areas is more efficient than a less intensive, haphazard effort over wide, poorly defined areas. The general approach to restrict wild dog control to within and close to paddocks also applies to the cattle industry but eradication of wild dogs in cattle areas is not as crucial as it is where sheep are present. Not all social groups of wild dogs are involved in attacks on cattle and co-operation between wild dogs is usually necessary for a successful attack on cattle. This suggests that a general reduction in the number of wild dogs in problem areas should be enough for the protection of cattle herds. More effort than this would be considerably more expensive, and is not needed to protect cattle from predation. All the same, the coordination of baiting between properties, giving a more general wild dog population reduction, rather than only over one small area, is still a good strategy.

Choosing control methods

Baiting is usually the preferred method because of its cost-effectiveness. Trapping is sometimes needed to remove wild dogs which do not take baits, or in areas where baiting is not possible. No single control technique is appropriate for every situation. In designing a control campaign, take account of:

- the extent of the problem, for example, is damage restricted to a specific area, or is it widespread?;
- the history of control work in the area, for example, has the area been repeatedly baited?;

- the availability of prey for wild dogs, for example, is there abundant natural prey as a result of good seasons?; and
- the time of year, for example, is it the period such as August/September when wild dog movements will be restricted because young pups are present, or is rain likely to disrupt control plans?

Baiting

Baiting is the most cost-effective lethal technique available to control wild dogs, and the only practical means for achieving population control in many inaccessible and remote areas.

1080

1080 is now the only poison registered for use in baits for wild dogs in Western Australia, and strict regulations govern its use. Trained landholders can purchase bait products containing 1080 after they have obtained Baiting Approval from an authorised officer of the Department of Agriculture.

Farmnote *Guide to the safe use of 1080 poison* (Agdex 686) details important precautions. Strychnine can now only be used to poison the jaws of traps (see below).

1080 has many advantages over other toxins such as strychnine. Compared with many native species, canids such as dogs and foxes are particularly sensitive to 1080. This makes baiting with 1080 more target-specific than with other types of poison. In addition, the water solubility of 1080 means that the toxin is eventually leached out of uneaten baits by rain, reducing any lasting potential hazard posed by those baits. 1080 is also broken down into harmless by-products by micro-organisms, eliminating any potential for long-term environmental contamination.

Bait characteristics and field production

Commercially produced baits may become available in Western Australia in the future, but currently, most baits used for wild dog control in this state are prepared in the field from kangaroo meat. These baits are made from pieces of meat (110 g fresh weight), each injected with 1080 solution (or treated with a single 1080-impregnated 'Rhodamine oat'), and then sun-dried on racks to lose about 60 per cent of their weight in moisture. Each bait nominally contains 6 mg of 1080.

Trials have shown that dogs readily eat the dry meat and that dried meat baits have several advantages over undried baits. Dried meat is more difficult than moist meat for small native carnivores and other species to eat, making the baiting



Dried meat baits.

even more target-specific. As well, dried meat remains intact for longer, and the baits are more resistant than moist baits to the rapid loss of 1080, which can occur through exposure to rainfall, microbial action, or insect attack. Rapid loss of 1080 is undesirable because baits may quickly become sub-lethal while still available to wild dogs. Sub-lethal dosing could result in some individuals becoming bait-shy, and in the much longer term, might even select for genetic resistance to 1080.

Bait longevity

Research has shown that dried meat baits killed radio-collared wild dogs up to seven weeks after the baits were laid, and testing for 1080 content has shown that some dried meat baits can remain toxic for considerably longer than this. Although generally helpful, the persistence of 1080 in dried meat baits in the absence of rain must be considered when judging the potential risks to non-target animals, particularly domestic dogs.

Ground baiting

Localised ground baiting is generally used in more accessible areas where wild dog activity has been identified, such as at watering points or along tracks favoured by dogs. Ground baiting allows these areas to be precisely targeted, reducing the number of baits needed, and ensuring that baits are not clumped too close together. If non-target animals such as birds are at risk, baits can be buried or hidden, for example, amongst leaves or bushes. A lure, such as a decomposing carcass, can be used to attract wild dogs into an area where baits have been placed.

Aerial baiting

Baits distributed from the air are laid near watering points and along identifiable routes used by wild dogs, such as vehicle tracks, major pads, watercourses, and gorges. But random and widespread distribution of baits is inefficient and increases the chance of non-target animals taking the bait. Even on the Nullarbor Plain, where there are few geographical features to channel or concentrate the activities of wild dogs, good results are gained by concentrating the baiting near the sparse and easily seen watering points.

In the large, regional baiting campaigns, fixed wing aircraft such as a Cessna 206 are generally used. These fly at a height of about 100 metres, depending on the terrain. Aircraft are fitted with hoppers and bait chutes, and the navigator directs a person acting as a 'bombardier' as to when and how many baits should be dropped. The path followed by the baiting aircraft is automatically logged into an on-board GPS, so that accurate records are kept of baiting operations. Sensors are incorporated into the bait chute and the data linked to the GPS so that the location and number of baits dropped are logged at the same time. This allows baiting campaigns to be readily reviewed and helps with future planning.

Rate of bait laying

There are no specific recommended rates of bait laying for wild dogs. Rates are determined by local experience, though it is likely that rates of aerial baiting could be reduced with no decline in overall baiting success. Obviously, the use of fewer baits saves money, and reduces any potential non-target risks associated with a baiting program.

Timing and frequency of baiting

The issue of when and how often to carry out baiting campaigns is a complex one, and depends on a number of factors. As well as economic factors, the availability of natural food for the wild dogs, and the season (weather, availability and distribution of water, and stage of the breeding cycle) can play a role.

Traditionally, the regional baiting campaigns in this state have been carried out in autumn (late April-May) and spring (September-October). The autumn timing was to coincide with the breeding activity, when mating is taking place, and bitches are in early pregnancy. The spring timing was to coincide with the stage when pups begin to move about, increasing the likelihood of wild dogs finding baits. Food demands are also likely to be high at this time, and in the more arid areas, surface water becomes more restricted, making it easier to target the limited number of waterholes with baits.

This approach is still followed, though baiting is often now only done in spring. Baiting earlier in the year is sometimes abandoned due to cost considerations and the possibility of rain leaching 1080 from the baits (see above). In some areas, the spring baiting is being moved to even later in the year, into early summer, when the water supply becomes even more restricted.

Aerial baiting for wild dogs is usually repeated on an annual cycle. There may be occasions when baiting in buffer zones could be missed in some years without jeopardising livestock protection but this could be a risky approach unless very detailed information is available on how many wild dogs are in an area, how many are breeding, and on the abundance of the food supply. Otherwise, the safest insurance strategy is simply to bait the known problem areas on an annual basis.

Trapping

Trapping is labour intensive and therefore expensive, and so it is unsuitable for general population reduction. But it is effective in dealing with individual wild dogs creating problems. Trapping is normally used where baiting has been ineffective, for example in sheep paddocks, where wild dogs are less likely to take baits because of abundant food.

Trapping must be carried out carefully to reduce suffering to captured animals and to reduce the risk of catching non-target animals. Humane, successful use of traps requires training and experience. Incorrect setting and placement can result in individual wild dogs becoming trap-shy, making them very difficult to trap. Careful selection of trap sites and the use of lures also reduces the chances of catching non-target animals. In Western Australia, traps are poisoned with strychnine to ensure that trapped wild dogs die quickly (see *Farmnote Guide to the safe use of strychnine for jawed traps*, Agdex 686).

The Lanes steel leg hold trap is the most widely used trap for wild dog control in Western Australia. Increasing concern over animal welfare issues surrounding the use of steel-jawed traps has led to them being banned in some states. This has resulted in a move towards traps that have some form of rubber-like padding on the jaws. Lanes traps can be modified in this way, with no negative impact on success. The padding simply reduces the likelihood of serious injury to the trapped animal. The use of strychnine on the jaws of traps in this state largely removes the risk of long-term

suffering by a trapped dog, but the ban on bare-jawed traps may one day extend nationwide. Apart from modifications to existing traps, this should have no practical impact on the use of traps for wild dog control in Western Australia.

Shooting

Wild dogs are seldom seen during the day and in controlled areas they are especially wary of people. Shooting is therefore only an opportunistic method of wild dog control. Suitable high-powered firearms should be used to ensure accuracy and a humane kill over the type of distances often involved.

Exclusion fencing

Exclusion fencing provides a non-lethal means of protecting livestock from predators. Where conditions are suitable, and fences are properly maintained, wild dogs can be excluded by either wire netting or high-voltage electric fences. Fencing is very costly and only useful when wild dogs can be effectively removed from the properties needing protection. In Western Australia, large scale exclusion fencing against wild dogs is normally not practical. Not only is there an uneven assortment of problem and non-problem areas, but also much of the terrain involved (such as watercourses and breakaways) would make the construction and particularly the maintenance of exclusion fences very difficult and expensive.

Netting fences have been used in the Eastern States for many decades and generally act as a barrier along the extensive and distinct boundaries between sheep grazing areas and cattle country or crown land. Several Western Australian properties on the Nullarbor have boundary fences of dog-proof netting. These fences are effective but they are very expensive to construct and maintain. Electric fences are generally cheaper than netting fences.

Electric fences have been developed to keep out a variety of vertebrate pests, including wild dogs. Some make use of an existing fence and incorporate one or two electrified wires on outriggers; others are constructed as plain wire fences with six or seven alternating live and earth wires. Reducing the wire spacing and increasing the number of wires increases the effectiveness of electric fences, but also increases their cost.

Wild dogs sometimes cross even well maintained fences so occasional mopping-up efforts using standard control techniques must also be used. In most fenced areas, some form of buffer zone control is used to relieve potential pressure on the fences.

Biological control

It is unlikely that deliberate biological control of wild dogs would be successful. Dog diseases such as distemper and mange are already present in wild populations, so attempts to re-introduce them to some areas would have little or no impact. New or genetically modified diseases offer little hope because domestic dogs would be equally susceptible, and public concern would almost certainly prevent their introduction. As well, the conservation status of dingoes would have to be considered in any attempt to introduce any new and naturally spreading lethal agent.

Further information

Contact any Agriculture Protection Officer or the Department of Agriculture at South Perth, tel. 9368 3333.

See Farmnote

- *Guide to the safe use of 1080 poison* (Agdex 686)
- *Guide to the safe use of strychnine for jawed traps* (Agdex 686)
- *Bounties and wild dog control* (Agdex 674)



Feral pigs and 1080 baiting – what you need to know

Reviewed
January
2009

By Laurie Twigg, Tim Lowe and Gary Martin, Vertebrate Pest Research Section, Forrestfield.

Feral pigs (*Sus scrofa*) occur over about 40 per cent of Australia, where they can inflict losses to agricultural production in excess of \$100 million per year. Feral pigs also have detrimental impacts on biodiversity, and can act as reservoirs/transmission agents for a number of endemic and exotic animal diseases.

In Western Australia, feral pigs are mainly found in the mid-west and south-west of the State, and in parts of the Kimberley. Feral pigs also occur in parts of the De Grey river system, and on some off-shore islands in the Kimberley.

Although shooting and trapping can be used as control techniques, baiting using 1080 (sodium fluoroacetate) is the most effective option for controlling feral pigs.

Shooting is the least preferred technique as it usually only removes a small proportion of pigs, and/or it can disperse the pigs, making their control more difficult. Trapping is relatively labour-intensive and may not always remove the older and 'wiser' pigs.

Status

In Western Australia, feral pigs are declared pests under the *Agriculture and Related Resources Protection Act 1976*, and as such landholders are required to control feral pigs on their properties. Any control option used must be in accordance with the *Animal Welfare Act 2002*. It is illegal to 'swill feed' feral pigs for control or other purposes. It is also an offence to hold feral pigs in captivity without a permit.



Figure 1: Feral pigs feeding at a bait station. (T. Lowe)

Important Disclaimer

The Chief Executive Officer of the Department of Agriculture and Food and the State of Western Australia accept no liability whatsoever by reason of negligence or otherwise arising from the use or release of this information or any part of it.

Important biology

Contrary to popular belief, feral pigs are not always confined to waterways or drainage areas, but rather can be found in most areas where they can find appropriate food, water, and shelter (for example breakaways, remnant vegetation, swamps, riparian habitats). They will also travel considerable distances (>20 km) in a single night to reach preferred feeding and/or watering areas. Consequently, it is important that you and your neighbours have a reasonable understanding of the behaviour of feral pigs in your area so you can maximise the chances of a successful baiting program. Baiting programs will also be more effective when they are coordinated with your neighbours.

Feral pigs will often travel along defined tracks, creating pads similar to those of sheep and cattle. Evidence of feral pigs is usually most pronounced at the end of autumn and early winter when food supply is more limited, and pigs need to travel further to find food. This is the best time to bait, provided that six to eight days of fine weather are expected (1080 is highly water-soluble and thus readily leaches from baits as a result of rain).

Bait station design

Bait stations comprise two raked-earth plots each 1 m² in size and spaced 5 m apart. If necessary, cattle can be excluded with a temporary fence of barbed wire with the lowest wire about 65 cm above the ground (Figures 2 and 3). Where possible, ensure that there is at least 100 m between each bait station.

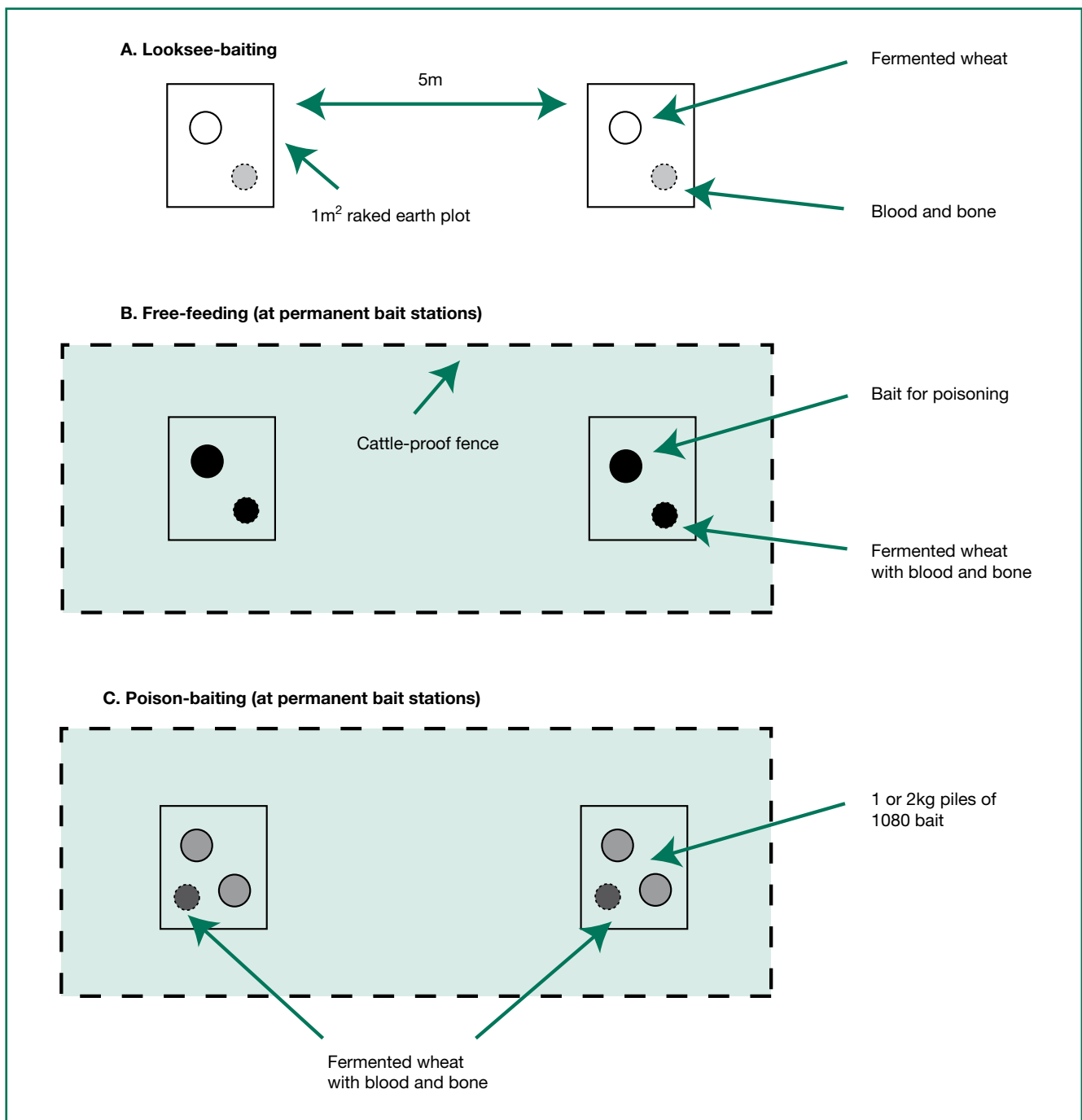


Figure 2: Layout of the raked-earth plots and the bait stations.

Suitable bait materials

Research trials in Western Australia indicate that the best bait materials for feral pig control are malted barley, wheat and plain barley. Feral pigs display a very mixed response to lupin bait so lupins may not always result in good control. Commercial pig pellets are ineffective in controlling feral pigs.

Fermented wheat is a good attractant for feral pigs and is prepared by soaking wheat in equal parts of water for at least 24 hours. A small handful of blood and bone (do not use the deodorised product) is placed on top of, or next to, the piles of fermented wheat as an added attractant.

Baiting method

1080 Concentrate Black is the only product registered for baiting feral pigs in Western Australia, and it must be used in accordance with the label.

The baiting method is a four stage process.

Stage 1: Looksee-baiting

Looksee-baiting is undertaken in those areas with recent evidence of pig activity (rooting, pads, faeces, feeding areas) to determine where the bait stations should be located. Looksee plots (one or two 1 m² raked-plots) are established by placing a 0.5 kg pile of fermented wheat with about 90 g of blood and bone on each plot (Figure 2). A light trail of fermented wheat (about 5 m in length) can also be laid either side of the plots to maximise the likelihood that the pigs will find the grain. Each day, record the amount of fermented wheat taken, then remove any tracks on the looksee plots using a garden rake. If any fermented wheat is taken, then replenish each plot back to its original amount.

Stage 2: Free-feeding

Formal bait stations (two raked-plots spaced 5 m apart) are only established at those plots where most of the fermented wheat is eaten during the looksee-baiting stage. You need to ensure you have several areas where this occurs so that you can establish at least two to six permanent bait stations at these locations.

Once the formal bait stations are established, free-feeding is undertaken using a pile of the fermented wheat (about 0.5 kg per raked plot with added blood and bone) and a 1 kg pile of the bait type to be ultimately used to poison the pigs (Figure 2). Free-feeding should continue until there is good consumption of grain for at least three to four consecutive nights. Do not continue to free-feed for any longer than necessary, as pig behaviour may change, and the pigs can leave the area.

Stage 3: Poison-baiting

Poison-baiting should be only undertaken after three to four consecutive nights of good take of the free-feed has occurred. Make sure you remove all residual grain/bait before poison-baiting commences.

Two 1 or 2 kg piles of 1080-treated bait are then added to each raked plot. Thus, each station generally has 4

or 8 kg of 1080-bait. A small amount (about 200 g) of the fermented wheat with blood and bone (about 50 g) is again added as an attractant in the corner of each raked plot (Figure 2).

If more than about 30 pigs are suspected to be present (see next section on estimating numbers), do *not* increase the amount of 1080-bait per raked plot, but instead add one to two additional raked earth plots as described above (maintain about a 5 m spacing between plots). This ensures that all feral pigs have an opportunity to feed on the toxic bait, and avoids any excessive feeding by individual pigs.

Poison-baiting must continue for at least four to five consecutive days or until no further poison bait is eaten. The piles of poison bait at each station are made up to their original amounts each day. Keeping a record of bait station visits (for example, tracks of pigs, birds, kangaroos etc.), and the amount of bait eaten, is important as it helps to determine when baiting should cease.

Usually, most pigs are killed in the first one to two nights of poison-baiting, but you need to leave the poison bait in place for at least four to five nights to ensure that all pigs in the area have been killed. Occasionally, there may be several mobs of pigs using an area, and some individuals may not return to the stations for a few days. Thus, there may be periods with no pig visits or feeding, followed by a period with reasonable consumption of poison bait. Poison-baiting should continue until you believe all pigs have been killed.

Stage 4: Follow-up monitoring

If required, follow-up monitoring can be undertaken by removing any residual grain (toxic or non-toxic) and adding 0.5 kg piles of fermented wheat (with about 90 g of the blood and bone) to each plot as a final measure to determine if any pigs remain. If further grain is consumed by pigs, remove the residual bait and re-poison as above. Follow-up monitoring is particularly important if the number of pigs is not well known and/or a number of different mobs are believed to be present.

Estimating pig numbers

It can be difficult to estimate the number of pigs which are present. Visual observations, the amount of rooting and other signs of pig activity can help. The use of raked-earth plots are important in this respect as they can allow the age of the pigs to be determined, and hence some estimate of numbers. For example, the presence of one to two sows with juvenile pigs/piglets suggests there would be eight to 12 pigs in such a mob. However, when making these estimates be aware that a small number of pigs can cause a lot of damage/rooting, so it is easy to over-estimate pig numbers.

When unsure, it is better to add extra bait stations or raked plots. Four kilograms of 1080 bait can kill about 20 to 25 moderately-sized adult pigs, and the recommended baiting method regularly kills large pigs (>70 kg).

Baiting and non-target species

Research trials have shown that there are very few potential risks to non-target species from the recommended baiting method, and that any risks can be easily managed by a common sense approach. Birds and kangaroos will occasionally spread bait, but little bait is actually eaten. Interestingly, a number of foxes have been killed by eating 1080-treated grain meant for feral pigs.

Muscle residues in pigs poisoned with 1080 are too low to pose any risk to those native animals likely to feed on these carcasses. Irrespective of season, poisoned carcasses readily degrade and become inedible within two (small pigs, <20 kg) to eight (large pigs, >50 kg) days. However, because of their higher sensitivity to 1080, introduced animals such as dogs, foxes and cats can be killed by feeding on the carcasses of poisoned pigs.

A number of steps can be taken if there is a concern regarding possible effects on native species. These include digging a shallow depression and lightly burying the poison bait, or covering bait placed on the surface with a few small sticks to restrict access by birds. However, do not undertake either of these steps until the feral pigs are feeding freely at the bait stations. Because of the potential for increased degradation of 1080, do not bury bait in moist soil, and do not leave the buried bait available to pigs for more than 14 days. Burying bait should be a last resort when all else fails.

If there are concerns regarding the germination of grain in conservation areas (for example bush remnants), malted barley can be used as bait as it goes through a steeping process and is not fertile.

Other factors

Although pigs poisoned with 1080 are often found within 200 m of a bait station, some pigs can travel more than 3 km before they succumb. This, together with the dense vegetation and often difficult terrain where many pigs reside, makes finding poisoned pigs difficult. The lack of obvious carcasses does not mean your campaign has failed. The best indicator of success is the amount of bait taken, and the level of decline in pig activity (for example rooting, tracks). This is where follow-up monitoring can be a useful component of your baiting strategy.



Figure 3: A 1080 bait station with a temporary fence to exclude cattle. The lowest wire is about 65 cm above-ground. (L. Twigg)

Who can receive, mix and use the bait?

Only Licensed Pest Control Operators (LPCOs) specifically endorsed by the Department of Health to mix 1080 Concentrate Black and authorised officers of the Department of Agriculture and Food, Western Australia (DAFWA) can receive and mix the poison on your behalf.

On the 1080 baiting application form you can nominate the LPCO who will be receiving 1080 Concentrate Black and mixing the bait. Alternatively, if there is not an endorsed LPCO in/near your area, you may nominate a DAFWA officer to receive and mix the bait. After mixing, the 1080 bait can be laid by the LPCO or by yourself if you have received appropriate training from DAFWA.

Further information

Contact the Department of Agriculture and Food on Freecall 1800 084 881 or email info@agric.wa.gov.au. Additional publications on control of feral pigs can be obtained by visiting the Department's website at: www.agric.wa.gov.au.

Acknowledgments

The financial support of the Natural Heritage Trust funding through the National Feral Animal Control Program administered by the Bureau of Rural Sciences is gratefully acknowledged. We also thank all those who helped with the research which underpins these recommendations.

APPENDIX F: 1080 PUBLICATIONS & FURTHER READING

These publications are available from your DAFWA Biosecurity Officer. You can also view them on the DAFWA website: www.agric.wa.gov.au. Simply enter the relevant Farmnote or Publication number in the site search engine.

General 1080 Publications

[Code of Practice on the Safe Use and Management of 1080 \(April 2009\)](#). Health Department of Western Australia – Environmental Health Service.

[Guide to the safe use of 1080 poison \(Farmnote No. 381/2009\)](#)

[1080 Characteristics and use \(Bulletin 4776\)](#)

1080 Rabbit Control

[Options for rabbit control \(Farmnote No. 89/2001\)](#)

[Landholder use of 1080 One-shot oat rabbit bait \(Farmnote No.63/2005\)](#) *

[Bait stations and rabbit control \(Farmnote No. 38/2003\)](#)

1080 Fox Control

[Fox Baiting \(Farmnote No. 61/2003\)](#) *

1080 Wild Dog and Dingo Control

[Wild dog control \(Farmnote No. 29/2002\)](#) *

General Rabbit Publications

[European Rabbit \(Farmnote No. 39/2003\)](#)

General Fox Publications

[Red Fox \(Farmnote No. 115/2000\)](#)

[Are foxes killing your lambs? \(Farmnote No. 62/2001\)](#)

General Wild Dog and Dingo Publications

[Dingo \(Farmnote No. 133/2000\)](#)

[Recognising wild dog and dingo predation \(Farmnote No. 124/2000\)](#)

[Wild Dog Control: Facts behind the strategies \(Miscellaneous Publication No. 23/2003\)](#)

Feral Pigs

[Feral pigs and 1080 baiting – what you need to know \(Pestnote No 197\)](#) *

[Feral Pig \(Farmnote No. 110/2000\)](#)

[Feral pig control by trapping \(Farmnote No. 36/2003\)](#)

* Included in the Landholder Information for the Safe Use & Management of 1080 booklet

AGRICULTURAL AREAS 1080 RISK ASSESSMENT APPLICATION

To enable a Landholder to possess and use a registered 1080 product for vertebrate animal control on leasehold, or freehold land.

OFFICE USE ONLY Application No / FRF:	Property CRIS No.:
---------------------------------------	--------------------

Please complete this Application only if there is no current Risk Assessment approved for the property. To request products under an approved Risk Assessment, please complete the Product Request on the reverse of this form.

⇒ **Baiting Application** – the applicant must be the Owner or Occupier of the land to be baited.

Applicant's name				Status: owner <input type="checkbox"/>	occupier <input type="checkbox"/>
Applicant's Trading Name:					
Telephone No:	Fax:		Mobile:		
Property Address:	Postal Address:	Shire:		Total area of property (Ha):	
	P/Code:				
Approval period sought for Risk Assessment: / / to / / (may be up to five years)					
Species to be controlled	<input type="checkbox"/> Rabbits	<input type="checkbox"/> Foxes	<input type="checkbox"/> Wild dogs	<input type="checkbox"/> Feral pigs	

Attach a Map of the Property – include points below where relevant and show all distances from bait area

- | | |
|--|--|
| <ul style="list-style-type: none"> • Indicate sites or areas not to be baited (shade in); • Roads & tracks (indicating those used for baiting • Location of dwellings (own and adjacent) (✕); • Proposed locations of all poison warning signs (▲); | <ul style="list-style-type: none"> • Access (public and management), highlighting public entry points; • Water bodies and water courses. • Constructed Recreational sites (◆) • Large properties may also indicate general baiting area (diagonal hatch) |
|--|--|

Applicant Declaration

I,(Print full name)
of (Property address)
and being the owner or occupier of the above land state that

- the above information and the attached map is true and correct, and should the use of 1080 products on my property be approved

I hereby agree to ensure that I and any person nominated as my agent as Receiver or Approved User for the purposes of this poisoning program is appropriately trained and/or authorised and shall comply with the **Code of Practice for the Safe Use and Management of 1080 in WA** and Label **Directions of Use** for 1080, particularly in respect to;

- Neighbour notification, warning signs, distance restrictions, cleanup up after baiting and disposal of wastes, precautionary measures, storage and transport and record keeping; and
- will also comply with any and all additional conditions applied by the Authorised Risk Assessment officer.

As the owner or occupier of the above land I acknowledge that should the risk factors on this property change, I must inform an Authorising Officer and submit a revised Baiting Application Form and property map.

Signature: _____ Date: / /

Please complete the Product Request Form (see over) to detail the type and quantity of baits required, and to nominate any appropriate person to act as your agent to receive and or lay baits.



AGRICULTURAL AREAS 1080 PRODUCT REQUEST FORM

APPLICANT NAME:		RISK ASSESSMENT REFERENCE*:		
Proposed baiting period: / / to / /				
Target Species	<input type="checkbox"/> Rabbits	<input type="checkbox"/> Foxes	<input type="checkbox"/> Wild dogs	<input type="checkbox"/> Feral pigs
Bait area	Length of transect km	Area to be baited ha	Area to be baited ha	Area to be baited ha
Type of Product (tick one)	<input type="checkbox"/> Oat bait (Pre-prepared ready to lay) <input type="checkbox"/> Pre-mixed Pre-feed Oat Bait	<input type="checkbox"/> Fox Bait 3mg/bait <input type="checkbox"/> Impregnated oat 3mg	<input type="checkbox"/> Wild dog bait 6mg/bait <input type="checkbox"/> Impregnated oat 6mg	<input type="checkbox"/> Feral pig bait 72mg/bait
Quantity of bait				
Should approval be given, the 1080 Authorisation Voucher to receive baits will be:				
<input type="checkbox"/> Collected personally or by the nominated receiver, or mailed to <input type="checkbox"/> Applicant as above or <input type="checkbox"/> Receiver as below				
Nominees of Applicant to receive and/or lay 1080 baits in accordance with Poisons (Section 24)(Registered Pesticide 1080) Notice 2000				
Nominate the person who will be receiving and/or laying baits in the columns and the number 1, 2 or 3 in the box marked (X) 1. Owner/Occupier/Nominee (as Approved by Authorised Dept) 2. Authorised DAFWA/DEC Officer 3. Licensed Pest Management Technician	X	RECEIVER of bait Name/Address	X	APPROVED USER of bait Name/Address
Applicant Declaration				
I, (Print full name)				
of (Property address)				
Hereby declare that				
<ul style="list-style-type: none"> • any person nominated as my agent as Receiver or Approved User for the purposes of this poisoning program is appropriately trained and/or authorised and shall comply with the Code of Practice for the Safe Use and Management of 1080 in WA and Label Directions of Use for 1080; and 				
<input type="checkbox"/> Since the approval of the abovenoted Risk Assessment, there have been no changes to the property that may influence its risk status.				
Signature: _____ Date: / /				

* A current Risk Assessment must be approved for the property to enable issue of baits. If there is no current Risk Assessment in place, please complete the Risk Assessment Application on the reverse of this form.

To: _____ Date: ____ / ____ /20
(Recipient's Name and Address)

Notice of Intention to Lay 1080 Poison at _____
(Address where poison is to be laid)

As a neighbouring landholder I wish to inform you that I (or a Department of Agriculture and Food WA Biosecurity Officer or other authorised person) intend to lay 1080 poison baits on my property for the control of foxes I wild dogs I rabbits I feral pigs. I intend to commence baiting on ____ I ____ and complete the baiting program on ____ I ____ .

Please be advised that 1080 is highly toxic. The consumption of an animal that has ingested a lethal or sub-lethal dose of 1080 poses a serious risk of secondary poisoning to humans and other species. Taking of carcasses, removal of hides and shooting or trapping animals (for human or animal consumption) is prohibited during the baiting period and for at least 14 days after the completion of the baiting program.

Please ensure children and other persons in your care are restricted from entering the site of baiting. Please restrain your pets, working dogs and stock to avoid the possibility of poisoning through direct baiting or through eating 1080 poisoned animals.

If you would like further information about this proposed baiting program please contact me on the number below. Alternatively, you can speak to a Biosecurity Officer at the Department of Agriculture and Food WA (DAFWA). More information about the use of 1080 is available from DAFWA's website: www.agric.wa.gov.au.

Regards,

(Sender's Signature)

(Sender's Address)

(Sender's Name)

(Sender's Phone no.)

To: _____ Date: ____ / ____ /20
(Recipient's Name and Address)

Notice of Intention to Lay 1080 Poison at _____
(Address where poison is to be laid)

As a neighbouring landholder I wish to inform you that I (or a Department of Agriculture and Food WA Biosecurity Officer or other authorised person) intend to lay 1080 poison baits on my property for the control of foxes I wild dogs I rabbits I feral pigs. I intend to commence baiting on ____ I ____ and complete the baiting program on ____ I ____ .

Please be advised that 1080 is highly toxic. The consumption of an animal that has ingested a lethal or sub-lethal dose of 1080 poses a serious risk of secondary poisoning to humans and other species. Taking of carcasses, removal of hides and shooting or trapping animals (for human or animal consumption) is prohibited during the baiting period and for at least 14 days after the completion of the baiting program.

Please ensure children and other persons in your care are restricted from entering the site of baiting. Please restrain your pets, working dogs and stock to avoid the possibility of poisoning through direct baiting or through eating 1080 poisoned animals.

If you would like further information about this proposed baiting program please contact me on the number below. Alternatively, you can speak to a Biosecurity Officer at the Department of Agriculture and Food WA (DAFWA). More information about the use of 1080 is available from DAFWA's website: www.agric.wa.gov.au.

Regards,

(Sender's Signature)

(Sender's Name)

(Sender's Address) (Sender's Phone no.)

To: _____ Date: / /20
(Recipient's Name and Address)

Notice of Intention to Lay 1080 Poison at _____
(Address where poison is to be laid)

As a neighbouring landholder I wish to inform you that I (or a Department of Agriculture and Food WA Biosecurity Officer or other authorised person) intend to lay 1080 poison baits on my property for the control of foxes I wild dogs I rabbits I feral pigs. I intend to commence baiting on I I and complete the baiting program on I I .

Please be advised that 1080 is highly toxic. The consumption of an animal that has ingested a lethal or sub-lethal dose of 1080 poses a serious risk of secondary poisoning to humans and other species. Taking of carcasses, removal of hides and shooting or trapping animals (for human or animal consumption) is prohibited during the baiting period and for at least 14 days after the completion of the baiting program.

Please ensure children and other persons in your care are restricted from entering the site of baiting. Please restrain your pets, working dogs and stock to avoid the possibility of poisoning through direct baiting or through eating 1080 poisoned animals.

If you would like further information about this proposed baiting program please contact me on the number below. Alternatively, you can speak to a Biosecurity Officer at the Department of Agriculture and Food WA (DAFWA). More information about the use of 1080 is available from DAFWA's website: www.agric.wa.gov.au.

Regards,

(Sender's Signature)

(Sender's Address)

(Sender's Name)

(Sender's Phone no.)

To: _____ Date: / /20
(Recipient's Name and Address)

Notice of Intention to Lay 1080 Poison at _____
(Address where poison is to be laid)

As a neighbouring landholder I wish to inform you that I (or a Department of Agriculture and Food WA Biosecurity Officer or other authorised person) intend to lay 1080 poison baits on my property for the control of foxes I wild dogs I rabbits I feral pigs. I intend to commence baiting on I I and complete the baiting program on I I .

Please be advised that 1080 is highly toxic. The consumption of an animal that has ingested a lethal or sub-lethal dose of 1080 poses a serious risk of secondary poisoning to humans and other species. Taking of carcasses, removal of hides and shooting or trapping animals (for human or animal consumption) is prohibited during the baiting period and for at least 14 days after the completion of the baiting program.

Please ensure children and other persons in your care are restricted from entering the site of baiting. Please restrain your pets, working dogs and stock to avoid the possibility of poisoning through direct baiting or through eating 1080 poisoned animals.

If you would like further information about this proposed baiting program please contact me on the number below. Alternatively, you can speak to a Biosecurity Officer at the Department of Agriculture and Food WA (DAFWA). More information about the use of 1080 is available from DAFWA's website: www.agric.wa.gov.au.

Regards,

(Sender's Signature)

(Sender's Name)

(Sender's Address) (Sender's Phone no.)