

## Toxic Baits For Richardson's Ground Squirrel and Northern Pocket Gopher

April 2004

Prepared in Consultation with:

Pesticide Program, Alberta Environment,  
Pest Prevention and Management Unit, Alberta Agriculture, Food and Rural Development,  
Association of Alberta Agricultural Fieldmen,  
Pest Management Regulatory Agency, Health Canada

### NOTE:

The information in this publication has been provided to supplement and/or clarify label directions. If the information conflicts with label directions, follow the label. If in doubt regarding any label direction, please contact the pesticide manufacturer.

**End user concerns about the effectiveness of strychnine bait for controlling gophers and moles have prompted action into bait performance. The following information is an update for producers on knowledge gained to date.**

The success in controlling burrowing rodents with poisoned food baits depend upon many factors, not the least of which is bait palatability or attractiveness. Other important considerations are stage of life cycle, time of year, availability of foods and population size. Placing palatable bait at the correct time and location when target rodents will consume it is central to successful control.

AAFRD, in conjunction with other agencies, is developing effective management strategies to control damage from burrowing rodents. Information will be provided to end-users as it becomes available.

Northern pocket gophers (also known as "moles") and Richardson's ground squirrels (also known as "gophers") are different species of burrowing rodents with very different biology and responses to poison bait.

### *Northern pocket gopher*

The pocket gopher eats plants and does not hibernate. One litter from two to 10 young are born in April or May and disperse in June. Fresh earth mounds with no open entrance indicate the gopher's presence. Pocket gophers are rarely seen above ground.

For more information on the pocket gopher, please see the publication "Biology and Control of the Northern Pocket Gopher (*Thomomys talpoides*) in Alberta" available from Alberta Environment, Pesticide Program (phone: (780) 427-0031).

Research indicates that, because of the pocket gopher's reproductive capacity, control programs must remove more than 70 per cent of the gophers from a treatment area to have any significant impact. Research to date with a variety of toxicants has produced far less than 70 per cent control.

## *Richardson's ground squirrel*

Ground squirrels eat mostly plants, some insects and occasionally scavenge road-killed ground squirrels. One litter from six to eight young are born in April or May. Adults emerge in early spring and go into hibernation during June/July. Juveniles enter hibernation from August/November. Active burrows will have an open entrance. Ground squirrels are commonly seen sitting upright outside burrows.

The success of ground squirrel baiting programs varies widely. Factors that affect their success are being investigated.

## *Product performance factors*

For best results, follow label directions carefully. Instructions regarding bait placement and timing are intended to maximize bait feeding. Burrowing rodents prefer natural vegetation to bait. Incorrect timing or placement will discourage feeding and reduce control.

For information on the use of rodenticides or other strategies on bait use, please contact:

John Bourne  
Vertebrate Pest Specialist, AAFRD  
Vermilion, Alberta  
Telephone: (780) 853-8225  
Fax: (780) 853-4776  
email: [john.bourne@agric.gov.ab.ca](mailto:john.bourne@agric.gov.ab.ca)

Or phone 310-0000 toll-free in Alberta and ask the operator to connect you.

For information regarding burrowing rodents and their control, please contact your local Agricultural Fieldman or pest control officer.

## *Non-target poisoning*

Toxic bait can be a hazard to pets, livestock and wildlife that eat it. Secondary poisoning is also a potential risk when predators or domestic dogs eat poisoned ground squirrels. Baited areas should be checked daily. Collect and bury all ground squirrels that die above ground. If there is any evidence of secondary poisoning, collect the bait and terminate the control program. If bait is placed correctly and baited areas are monitored regularly, secondary poisoning is not normally a problem.

Other animals, including dogs, can be fatally poisoned by feeding on poisoned ground squirrels over an extended period of time. Symptoms include bleeding gums and tar-like stools. Contact your veterinarian immediately if you suspect poisoning.

## *Safety precautions in bait placement and handling*

Do not mix poison baits or add other poisons to baits. In addition to potential label use violations, these practices are unlikely to improve rodent control and could lead to an increased risk of secondary poisoning.

- Do not allow persons under the age of 18 years to handle or use toxic baits (unless directly supervised by an adult).
- Do not place bait where other animals are at risk. Advise adjacent neighbours that you are conducting a rodent control program where pets may be at risk.
- Where toxic baits are placed in bait boxes or stations, it is important to ensure that other animals cannot move, open, destroy or otherwise gain access to the bait. It is also important to protect bait from moisture. The box, pipe, tire or other station container must be securely anchored to the ground and have an opening large enough for the ground squirrel.
- Check bait stations regularly (daily if necessary) and keep them well maintained.
- Always wear gloves when handling animal poisons.
- Keep all animal poison concentrates and baits in a locked storage area. Cleanup any bait or concentrate spills immediately.