



## DID YOU KNOW...

An outbreak of Equine Herpes occurred at a National Cutting Horse Association event in Utah recently and an affected horse has been found in Stanislaus County. Currently, infected horses are being quarantined.

by  
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## What do New Changes in Aluminum Phosphide Labels Mean for Burrowing Mammal Control?

By Roger A. Baldwin  
UC IPM Wildlife Pest Management Advisor

The California ground squirrel (*Spermophilus beecheyi*) and pocket gopher (*Thomomys* spp.) are widely considered to be the two most damaging wildlife pests in California agriculture. Numerous techniques are available for controlling ground squirrels and gophers including trapping, anticoagulant baits, acute toxicant baits, and burrow fumigants. Trapping can be an effective method to remove small to medium size populations of gophers and ground squirrels but often becomes too time consuming for large acreage. Both anticoagulant (e.g., diphacinone and chlorphacinone) and acute toxicant baits (e.g., zinc phosphide) can be quite effective at controlling ground squirrels when used appropriately. These rodenticides are less consistent but can still be effective when baiting for pocket gophers. Baiting is typically considered the cheapest and least time-consuming method for controlling both gophers and ground squirrels. However, there are potential concerns for non-target poisonings when using rodenticides which can limit their applicability in some situations.

Burrow fumigants, such as gas cartridges and aluminum phosphide, do not typically pose as great of a concern for non-target exposure as baits, and usually involve shorter application times than trapping. Aluminum phosphide is particularly effective at controlling gophers and ground squirrels. Recent studies on ground squirrels and gophers indicated excellent control for both species (reduction in ground squirrel population = 97–100%; reduction in gopher population = 100%). Aluminum phosphide is a restricted use material; specific guidelines must be adhered to when using this material. Additionally, fumigation is generally only effective when soil is moist. Therefore, fumigation is restricted to late winter and spring or following irrigation. Nonetheless, aluminum phosphide fumigation is a very valuable part of an IPM program for controlling gophers and ground squirrels; its continued availability to growers is needed to maximize control efforts in many situations.

To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products which are not mentioned.	What do New Changes in Aluminum Phosphide Labels Mean for Burrowing Mammal Control? .....	Pg. 1-2
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Unfortunately, recent changes in aluminum phosphide labels have been implemented due to the gross misuse of this product that led to the death two young girls in Utah. These changes include the following:

- ◆ Use is strictly prohibited around all residential areas, including single and multi-family residential properties, nursing homes, schools (except athletic fields, where use may continue), day care facilities, and hospitals.
- ◆ The products must only be used outdoors for the control of burrowing pests, and are for the use on agricultural areas, orchards, non-crop areas (such as pasture and rangeland), golf courses, athletic fields, parks, and other non-residential institutional or industrial sites.
- ◆ Products must not be applied in a burrow system that is within 100 feet of a building that is or may be occupied by people or domestic animals. This buffer zone for treatment around non-residential buildings that could be occupied by people or animals has been increased from 15 to 100 feet.
- ◆ When this product is used in athletic fields or parks, the applicator must post a sign at entrances to the treatment site containing the signal word DANGER/ PELIGRO, skull and crossbones, the words: DO NOT ENTER/NO ENTRE, FIELD NOT FOR USE, the name and EPA registration number of the fumigant, and a 24-hour emergency response number. Signs may be removed 2 days after the final treatment.
- ◆ When this product is used out of doors in a site frequented by people, other than an athletic field or park (such as agricultural fields), the applicator shall post a sign at the application site containing the signal word DANGER/PELIGRO, skull and crossbones, the name and EPA registration number of the fumigant, and a 24-hour emergency response number. Signs may be removed 2 days after the final treatment.

Because of these changes, I have developed a questionnaire designed to develop accurate facts on various methods, including fumigation with aluminum phosphide, for controlling burrowing mammals in California. The information will be provided to registrants, the U.S. EPA, and others to help develop use policies, labels, etc. My primary objectives are to:

- ◆ Identify the level of use of aluminum phosphide for various burrowing mammals in agricultural areas prior to the new aluminum phosphide label restrictions.
- ◆ Identify how new aluminum phosphide label restrictions will alter use of a variety of control methods.
- ◆ Identify the potential impact of the new aluminum phosphide label restrictions on burrowing mammal populations.
- ◆ See if there is support to further increase safety for residents and other public bystanders by requiring a new Certified Applicator Category for use of aluminum phosphide fumigants for burrowing pest control IF such a category would ease restrictions set forth in the most recent aluminum phosphide labels.

The data collected should provide a much clearer picture of use patterns and importance of several methods, including aluminum phosphide, for controlling agricultural populations of burrowing pests in California. The survey can be accessed at the following web address:

<http://ucanr.org/sites/AluminumPhosphideSurvey/>

Two surveys are found at this website; one is for agricultural users, the other is for rodent control professionals who control burrowing mammals in urban/residential areas. Be sure you complete the appropriate survey. Once completed, the survey can either be: 1) saved and e-mailed to me, or 2) mailed to me via USPS. My e-mail address, mailing address, and phone number are provided at the end of this article. If you do not have internet access, give me a call or send a letter and I will mail a copy of the survey to you.

I must emphasize the importance of your participation in this survey if you use aluminum phosphide for burrowing mammal control. Data needs to be collected and subsequent results provided to the pertinent regulatory agencies to show the importance of aluminum phosphide for burrowing mammal control. Otherwise, there is a real possibility that we may completely lose aluminum phosphide for burrowing mammal control.

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## Ground Squirrel Bait

In addition to possible changes to the use of aluminum phosphide, the bait commonly used for ground squirrel control is listed as restricted material and requires a Private Applicators license to use. CDFA will hold a training session, followed by the test if it is requested. Contact your Ag Commissioner if you are interested in applying for the Private Applicators license. Study material is available at your local Cooperative Extension office as well.

## Food Safety - a Concern for All

Dr. John Maas was recently interviewed by "Food, Nutrition & Science" (<http://www.foodnutritionscience.com/index.cfm/do/monsanto.article/articleId/524.cfm>). Below is a portion of the interview touching on food safety. For the complete article please see the above link.

### What does agriculture need to do to insure better food safety?

Agriculture in general has done a great job of insuring food safety, and newer technology will help even more. Some problems like *E. coli* O157:H7 in hamburger are really not a problem if the finished product, hamburger, is properly handled and cooked. The problem comes in when critical steps in the process are comprised. Problems arise when food inspection, testing, handling, and cooking are inadequate (in some cases all four steps). Thus, our regulatory agencies must be vigilant at all times, and we must develop technologies to detect any problems via our product testing. As consumers, we must handle and cook hamburger appropriately. We all bear responsibility and accountability for our actions and decisions.

### Is food safety improving on imported foods? If not, what should we do to improve it?

The safety of imported foods is a concern for me. We have had problems from melamine contamination of pet foods to gross bacterial contamination of fruits and vegetables from certain countries. I feel comfortable with food produced in the U.S., and the best answer I have is

let's rely on U.S. food, only trade with countries we trust, and verify the safety of those imported foods.

### How will S. 510 (The Food Safety Modernization Act) improve things in regards to food safety?

It is too early to know if the Food Modernization Act will be effective. Many of the failures in food safety have been due to failures in regulatory agency oversight and accountability. More regulations may not have any impact if there are gaps in oversight and inspection. If the cost of compliance with ineffective regulations drives agricultural producers out of business and we have to rely on imported foods, we will all lose. In beef cattle production we initiated a Beef Quality Assurance (BQA) program over 20 years ago that is standardized across the U.S. and helps cattle producers meet common goals for food safety, cattle health, animal well-being and sustainability. While it is a voluntary program it has formed the basis for many certified products, and it continues to evolve. So far this has been a better answer than regulations that are not enforced.

## Equine Herpes

An outbreak of Equine Herpes occurred at a National Cutting Horse Association event in Utah recently and an affected horse has been found in Stanislaus County. Currently, infected horses are being quarantined.

The virus can spread through nasal secretions, horse-to-horse contact, as well as airborne. Infected horses often present with a temperature above 102-F before clinical signs appear. Equine Herpes can cause respiratory diseases, abortions and neurologic disease.

The incubation period for the virus is 2 to 14 days, but can be shed for up to 28 days. EHV-1-infected horses have high morbidity and mortality rates and people can help spread the virus through contaminated hands, clothing, shoes and vehicles.

If you believe your horse may have been exposed to Equine Herpes, contact your vet and attempt to limit the potential of spreading to other horses.

## **“Yellow Book” Goes On-Line**

The big book fondly referred to as the Yellow Book is now available on-line. The Cow-Calf Management Guide organized and updated by the Cooperative Extension Systems in Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming is now being housed by Colorado State University Animal Science Department ([http://www.csubeef.com/component/option.com\\_file\\_index/Itemid.80/](http://www.csubeef.com/component/option.com_file_index/Itemid.80/)). The full English version and what is currently translated into Spanish can still be purchased through the University of Idaho (<http://www.uidaho.edu/cals/avs/content/cowcalf>). If you have never seen the Yellow Book, here is a small sampling of some of the topics you can find.

The book is organized by major topics such as nutrition, health, reproduction, pasture management, and marketing to name a few. You can browse through the contents of each section on-line and click on any of the links where you would like more information. You will see on each sheet the authors and you will notice that often authors are from more than one state, providing a larger perspective for issues such as marketing. Most of the health and reproduction papers are written by the Vet Schools’ Specialists, just the person you want your herd health advice to come from.

So, why would you need to check out the Yellow Book? Maybe you want to design a new set of corrals and you want Temple Grandin’s advice on the best design. Instead of trying to call her, to have her consult with you, you could go to the Yellow Book and read her paper *Cattle Psychology During Handling and Corral Design* instead. Here you can find three different corral designs and tips for easy handling in the corrals from Temple Grandin herself. Or maybe you have a child starting a 4-H project and you want to have them read about some different management practices such as dehorning or castration to better understand why we do these management practices. Perhaps this year you had a lot of abortions and you are trying to figure out what could have caused them. There is a paper simply titled *Abortion of Cattle* that details all of the possible causes of abortions, from poisonous plants to infectious diseases with information on how to handle a fetus for a necropsy to pinpoint the exact cause (in California we have the opportunity to take them the Diagnostic Lab in Davis for very little cost). There is also a very handy table in the back that provides an overview of each infectious

disease, what tissue is needed for a necropsy, when we typically see an abortion from each one and also the control steps to prevent an abortion. Our own Genomics Specialist, Allison Van Eenennaam has a paper on using DNA to help select your cattle. This could be a new method that you want to check out and read more information to see if it would be a good fit for your operation compared to using EPDs.

As you can see there is a wide variety of information available for you to take advantage. Take a few minutes and glance at the different topics available, bookmark the website so you can find it easily the next time you have a question on any number of topics related to managing your cow-calf operation. The Yellow Book is a handy tool to have, and even better now that it is on-line.

## **Beef Quality Assurance Program**

If your ranch has not participated in the Beef Quality Assurance program in the past, plan to attend a local event Summer of 2012! The half-day event needs to be attended every three years to maintain current. California Cattlemen’s Association helps organize and certify attendees for the program. As many people from the ranch that can make it are encouraged to attend, but there is only a \$25 fee per ranch, currently. A regional BQA was just held in Davis, in May, with a local program slated for Summer 2012 in our area. As Dr. Maas mentions above, BQA is voluntary, but does provide a valuable service to the industry maintaining a high quality of standard for the beef you produce.

## **Rangeland Decision-Making Survey**

Dr. Ken Tate at the University of California Davis recently sent you a survey about your perspective on ranching in California. As of April 30, 2011 our team has received over 250 very thoughtful responses. We are asking for your help generating 350 more.

*Survey Continued . . .*

While we are gaining information that will make range science more useful to ranchers, we feel we are still missing many perspectives.

**Our goal is to receive 600 completed surveys by June 30, 2011.**

If you have not already, please take half-an-hour of your time to complete the survey and return it to Dr. Tate and his research team. Please encourage other ranchers to participate.

If you have decided not to complete the survey, we invite you to mail back a blank survey and a short explanation. This will help us understand who is not represented in the survey response pool. Full directions and a list of options for refusing the survey are below.

Thanks for your time, Dr. Tate and the Rangeland Decision-Making Survey team.

**Q: What do I do if I am not eligible for the survey or I don't want to take it?**

**A:** If you believe you are ineligible or are unwilling to complete the survey, please return the blank survey and a note indicating the reason you have elected not to complete it. Alternatively, you may call or email Tracy Schohr (916- 444-0845 or [tschohr@calcattlemen.org](mailto:tschohr@calcattlemen.org)). If you call, please include your name and reason for refusal so that we may remove you from future mailings. This will in no way affect your relationship with the CCA or the University of California Davis.

Possible reasons you may deem yourself ineligible include:

- ◆ You are under 18 years old
- ◆ You do not own a ranch or manage rangeland
- ◆ Someone else working for your operation has already completed the survey
- ◆ You received two survey packets and already mailed one in

**Q: How will my survey information be stored?**

**A:** This survey is for owners or renters of rangelands used for producing livestock. Individual survey responses are voluntary and completely confidential. Data analysis and reporting will be limited to aggregation across all respondents. The information you provide will not be identified by name, property, or in any other way. The research team analyzing the surveys will not see or handle any of your personal information. **Individual responses will NOT be shared with CCA or other participating**

**organizations or parties.** To guarantee your confidentiality, the address list has been maintained by CCA while all responses are returned to the University of California, Davis. Summaries of results will be shared in future CCA publications and will be available upon request.

**Q: Who is sponsoring this survey?**

**A:** The survey research is funded through the U.S. Department of Agriculture. The project is a collaborative effort between the University of California, Davis and partners that include: California Cattlemen's Association, the California Farm Bureau Federation, California Rangeland Conservation Coalition and others.

**Q: What questions are on the survey?**

**A:** In addition to some optional demographic information, the sections of this survey cover two major topics. The first asks about management practices and strategies for meeting diverse goals over diverse lands. This section asks about conservation programs and responses to drought. The second section asks about attitudes and values. This incorporates questions that appear in many other ranching surveys. It will allow scientists and CCA to better understand the complexities of ranching in California. We estimate it will take you 30 minutes to complete. However, the detail ranchers have contributed through comments indicate many people are spending much longer.

**Q: I lost my survey; can I get a new copy?**

**A:** Of course! A second survey will be mailed to all non-respondents in the next few weeks. You may also contact Tracy at the CCA.

**Q: What are other ranchers saying about the survey?**

**A:** Very good things! A few people have told us they think it is too long. A handful have noticed two typos that we missed on the last round of editing. One person told us that the photo the graphic designers selected for the cover is terrible (sorry!). Several dozens of people have taken the time to tell us it is the best survey they have taken. While we didn't think of everything, we consulted ranchers and other range professionals at every step. Members of the research team travelled all over the state interviewing ranchers trying to create the most inclusive and relevant survey possible.



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# **LIVESTOCK LINES**

**Stanislaus & San Joaquin Counties**

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## **UPCOMING EVENTS:**

### **New USDA-Inspected Cut and Wrap Facility Tour**

At long last Fred and Alice Manas are nearing the end of construction on their soon-to-be USDA-inspected cut and wrap facility in Esparto, west of Woodland. A tour of the facility will be given on Saturday, May 28<sup>th</sup> at 9 AM for prospective customers, namely livestock producers and others who may send referrals.

The business will be named Manas Ranch Meat Market and is expected to receive USDA certification in early June. The location is 26797 State Highway 16, Esparto, CA. Look for it at the corner of Hwy. 16 and County Road 86A.

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