

July/August 2000

---

**Bee Sure to Vote**  
**New Pollination Text**  
**Bee Removal Video**  
**Honey Promotion**

**Huge Bulletin Board**  
**Pesticide Use Cancellations**  
**Dark Vision**  
**Subscription Rate Increase**

---

Bee Sure to Vote

Many members of the U. S. beekeeping and honey handling industries will be mailed a ballot from the U.S.D.A. to vote on changes to the National Honey Board and the honey assessment rate. The magic number to be included in the vote is 6,000 pounds per year in 1998 and 1999. How do they know that you were involved with that much honey? They have records of who paid assessments. If you dealt with enough honey to be included in the vote, but haven't paid assessments in 1998 and 1999 for whatever reason, you won't receive a ballot. It is anticipated that ballots will be in the mail by the end of August. If your neighbors receive their ballots, and you don't, then contact Kathie Birdsell, USDA Agricultural Marketing Service, (888) 720-9917. This is too important an issue to

ignore. Be sure to vote on your future.

New Pollination Text

The last truly comprehensive book on crop pollination, written in the U.S., was published by the USDA in 1976. That text is on the Internet at the Tucson Bee Lab Web page, called GEARS. Over the past 25 years, more information has been developed regarding pollination of many crops. This newer information, plus much more, is included in a new text called, "Crop Pollination By Bees." The authors are Drs. Keith Delaphane (University of Georgia) and Dan Mayer (Washington State University).

The text is lengthy (352 pages) and hard bound, sending the price up to about \$100.00. It is published by CABI Publishing. The following is the descriptive text from the CABI website:

The collapse of the ubiquitous honey bee population during the past 20 years has caused a pollination vacuum for many crops. Surveys and grower experience indicate that a crisis exists in pollinator populations. This book is an accessible, practical and authoritative research-based guide to using bees for crop pollination. It emphasizes conserving feral bee populations as well as more traditional methods of culturing honey bees and other bees. It addresses the biology of pollination, culturing and managing bees for optimum crop pollination. Individual pollination requirements and recommendations for the world's main crops are covered in 36 short chapters that make up the second part of the book.

**Contents:**

- **Benefits of Bee Pollination**
- **Bee Pollination**
- **Bees: An Overview**
- **Bee Conservation**
- **Honey Bees: Biology and Status as Pollinators**
- **Honey Bees: Simplified Bee-Keeping for Pollination**
- **Honey Bees: Managing Honey Bees for Pollination**
- **Bumble Bees**
- **Alkali Bees**
- **Other Soil Nesting Bees**
- **Alfalfa Leafcutting Bees**

- **Orchard Mason Bees**
- **Carpenter Bees**
- **Bees and Pesticides**
- **36 crops from alfalfa to watermelon**
- **Priorities in Technology Development, Research and Education**
- **Appendices**

Bee Removal Video

Feral honey bee colony numbers have begun to increase, again, and Africanized honey bees continue to expand their range of "colonization." This means that colony removals will pick up in numbers. Have you wondered how this is done? To find out, you can purchase a 30-minute video titled, "Safely Removing Wild Honeybee Colonies."

Experts from the University of Arizona and U.S. Department of Agriculture provide a wide range of information on professional bee removal techniques in this video, including:

- ? Information on the biology of the honeybee.
- ? Types of locations where bees like to colonize, and ways to prevent colonies from getting established.
- ? Procedures for maximizing the safety of people and pets while removing highly defensive honeybees colonies.

? **Demonstrations of environmentally friendly ways to safely and effectively remove or destroy unwanted and potentially dangerous honeybee colonies. The video also shows how to prevent bees from re-establishing in an area.**

**Suitable for bee removal professionals and consumers, this video shows safe and cost-effective ways to remove colonies from residential and commercial property. Experts demonstrate methods for protecting people and pets against wild bee colonies, and they show locations where bees like to colonize.**

The video was produced by Educational Communications and Technologies, College of Agriculture, The University of Arizona. Each copy of the video costs \$35 (shipping included). Checks should be made payable to: The University of Arizona. Send the check with your name and address to: Publication Distribution Center, College of Agriculture, The University of Arizona, 4042 N. Campbell Ave., Tucson, AZ 85719. You may also call and use a credit card (MC or VISA) at: (520) 318-7275. If nothing else, this video should stimulate an interesting discussion at your next club meeting.

Previously, the same publishers have offered a \$55.00 training manual titled,

"Africanized Honey Bees in Arizona Training Manual."

Included are:

- 37 slides with a script,
- Public service announcements,
- Handout masters,
- Masters for four pamphlets,
- Sample 911 protocol,
- Two videos,

as well as a list of places to get additional materials.

The videos included in the training manual are:

- **Africanized Honey Bees in Arizona**, a comprehensive overview of Africanized honey bees since their arrival in 1993
- **Africanized Honey Bees**, a video of the 37-slide set narrated by a professional

The pamphlets included in the training manual are:

- **They are Called Africanized Honey Bees**
- **How to Bee Proof Your Home**
- **Outdoor Recreation Safety Tips**
- **Africanized Honey Bees and Your Pets and Livestock**
- **Preparing schools for Africanized Honey Bees**

The third offering from this source is a \$30 video titled: "Homeowner's Guide to Safe Honey Bee Swarm Control." Topics included are:

- ☞ **Ways to bring honey bee swarms under control**
- ☞ **Proper attire and necessary equipment**
- ☞ **Tips to help avoid stinging incidents**
- ☞ **Basic background about honey bees**

#### Honey Promotion

Do you do much to promote your vocation and the products that honey bees produce? Sounds like a lot of work? Well, this September is "National Honey Month," as it has been for years. We are approaching the "Holiday Season," so it is time to remind food preparers how well honey fits on the menu.

For a minimal amount of effort and few dollars invested in photo copying and postage, you can conduct an outreach effort to your local newspapers, schools, libraries (if they will let you), civic organizations, radio stations, and perhaps, TV.

Where do you start? Contact the National Honey Board for a free National Honey Month Publicity Kit. It includes press releases on honey bee pollination, local publicity tips, recipe brochures, beekeeping facts sheets, and more.

To order a kit, simply call 1-888-421-2977 and press 8. Or you can see the kit and its items in detail at [www.nhb.org](http://www.nhb.org) on the Web.

If you want something more substantive, the National Honey Board has a limited supply of spiral bound recipe books. Each book includes more than 100 recipes for entrees, salads, beverages, and desserts. Before September 30, you can get one copy free, an additional 1-45 copies for \$2.25 each, 50-119 copies for \$1.75 each, or 120 or more copies for \$1.25 each. You might wish to put a copy in a gift basket, in your honey display, in the hands of a food editor or staff of a cooking school, school libraries, in the hands of friends and family members, or sell them as a club fundraiser.

The cookbooks can be order at 1-888-421-2977, press 5.

#### Huge Bulletin Board

An article written by C.E. Farm Labor Advisor Refugio Gonzalez in Imperial County prompted me to contact him and ask what information must be "posted at agricultural work sites" of small operations (most beekeeping operations would fit that description of less than 50 employees). The list I received could cover a whole wall!

- ↪ Wage and Hour Laws  
(minimum wage and overtime-Wage Order 14-80, telephone (415) 557-7878
- ↪ Unemployment insurance  
(EDD-(916) 322-2835
- ↪ Disability insurance  
(EDD- (916) 322-2835)
- ↪ Workers compensation
- ↪ Verification of  
Employee right to work in  
the U.S. (1-9)
- ↪ Posting and Notice  
requirement
- ↪ Employee privacy
- ↪ Sexual harassment (DFEH  
Communication Center,  
2014 T St., Suite 210,  
Sacramento, CA 95814-  
5212)
- ↪ Race, religious, color,  
age, national origin,  
disability, marital  
status harassment (DFEH  
Communication Center,  
2014 T St., Suite 210,  
Sacramento, CA 95814-  
5212)
- ↪ Employee right to  
inspect personnel files
- ↪ Occupational safety and  
health (Cal/OSHA- (415)  
972-8844)
- ↪ Child labor laws
- ↪ Time off for jury and  
Witness duty
- ↪ Time off for voting
- ↪ Time off for military  
service
- ↪ Time off for service as  
emergency firefighter

- ↪ Smoking prohibited in  
most workplaces
- ↪ Notice to terminating  
employee under state  
insurance premium program

Additionally, if you wish to obtain a free copy of the Cal/OSHA "Farm Labor Contractor: Safety and Health Guide," call 1-800-963-9424. Even if you aren't a labor contractor, the information will be useful to you.

#### Pesticide Use Cancellations

The Oregon Department of Agriculture Pesticides Division, in the Fall 1999 (Issue 6) issue of OSHA Pesticide Quarterly, published the following information. **Dealing with EPA's Decision on Methyl Parathion and Azinphos-Methyl**

"On August 2, 1999, EPA accepted voluntary cancellations of many of the most significant food crop uses of methyl parathion and voluntary measures by registrants to reduce both dietary and worker risks from azinphos-methyl for use on a wide variety of fruits and vegetables. These actions were in response to achieving the goal of the Food Quality Protection Act.

#### **METHYL PARATHION**

❖**Cancelled Uses:** Apples, peaches, pears, grapes,

nectarines, cherries, plums, carrots, succulent peas, succulent beans, tomatoes, artichokes, broccoli, brussel sprouts, cauliflower, celery, collards, kale, kohlrabi lettuce, mustard greens, rutabagas, spinach and turnips, chrysanthemum, daisy, field-grown ornamentals, flowering plants, marigold, nonagri-cultural lands, roadside areas, wasteland, grasses grown for seed, nursery stock, and all mosquito larvacide uses.

❖**Uses Remaining:** Alfalfa, almonds, barley, cabbage, corn, cotton, dried beans, dried peas, grass, hops, lentils, oats, onions, pecans, rape seed (canola), rice, rye, soybeans, sugar beets, sunflower, sweet potato, walnuts, wheat, and white potatoes.

❖**For the year 2000:** Only methyl parathion products carrying new labels are to be used. Methyl parathion may only be used on retained crops in 2000.

Beginning January 1, 2000 and continuing through January 1, 2001, any methyl parathion in its original unopened container which does not carry the amended labeling may be returned for relabeling or repurchase.

**AZINPHOS-METHYL (Guthion<sup>0</sup>)**

(NOTE: This listing excludes uses for cotton and southern pine seed orchards.)

❖**Cancelled Uses:** Sugarcane, ornamental, Christmas trees, forest trees and shade trees.

❖**Increased Re-entry Intervals:**

Pome fruits, stone fruits and tree nuts: 14 days for hand thinning and harvesting and 2 days for propping, mowing, irrigating, scouting, and other similar activities.

Citrus: 30 days and 2 days for the respective activities as described above.

Grapes: 21 days for girdling, cane throwing, leaf pulling, cane cutting, bunch thinning, and hand harvesting; and 2 days for mowing, irrigating, scouting and other similar activities.

Potatoes, small fruits and berries, brassica vegetables, fruiting vegetables, cucurbits and melons, onions, forage crops, succulent beans, celery, spinach, parsley, pomegranates; 4 days (5 days in areas of less than 25 inches of rainfall/year) for all activities except 2 days for mowing (3 days in areas of less than 25 inches of rainfall/year), irrigating, and scouting activities.

❖**Maximum Use Rates:** Apples:  
Reduce maximum seasonal use rate from 6 pounds a.i. per acre to 4.5 pounds a.i. per acre and a maximum application rate of 1 pound per acre (with allowance of up to 1.5 pounds a.i. per acre for applies if the use is in conjunction with an IPM program and a 21-day Post Harvest Interval (PHI)).

Pears and other pome fruit:  
Reduce maximum seasonal use rate from 6 pounds a.i. per care to 4.5 pounds a.i. per acre.

Peaches and Nectarines:  
Reduce the maximum seasonal rate from 4.5 pounds a.i. to 3.375 pounds a.i. per acre.

❖**Worker Exposure Reduction:**

Prohibit all applications with hand-held equipment.

Require closed mixer/loader systems.

Prohibit the application by chemigation to pome fruits and peaches.

Prohibit application by fixed-wing aircraft to pome fruits and peaches.

Require closed cockpits for all aerial applications.

❖**Relabeling and Distribution:**

Registrants will relabel all existing stocks under their control by 12/1/99.

The sale of product bearing the old label is prohibited after 12/31/99.

By 10/10/99, the registrants shall send letters to all distributors and shall provide information to all dealers explaining that:

1. The sale of azinphos-

methyl products bearing the old label is not legal after 12/31/99.

2. The registrant will supply new labels, will replace product, will issue credit or refunds for any unopened full container, and/or will supply both dealers and users with the new labels if desired.

Product carrying the old label that is in the hands of growers may continue to be used per the old label directions (use old product early in season to avoid possible over-tolerance problems).

❖**Tolerance Reductions**

**Effective January 1, 2000:**

Reduce the pome fruit tolerance from 2.0 to 1.5 ppm by February 1, 2001.

Registrants will petition EPA to further reduce this tolerance to 1.0 ppm by February 1, 2001.

Reduce the canberry tolerance from 2.0 to 0.5 ppm.

Reduce the grape tolerance from 5.0 to 4.0 ppm.

❖**Importation Restrictions:**

EPA intends to place a cap on the quantity of azinphos-methyl imported into the U.S. to prevent a shift to azinphos- methyl use.

If you have any questions on distribution or labeling requirements, contact Janet Fults at (503) 986-4652 or e-mail: [jfults@oda.state.or.us](mailto:jfults@oda.state.or.us).

## Dark Vision

Pamela Munn, in *Bee World* Vol. 80, No. 2, 1999, reviewed studies by three researchers to determine if bees could discern shapes in dim light. Using backlit grids of decreasing sizes, they determined that honey bees can distinguish shapes well below the limits calculated for compound eyes. Two potential explanations are given for this ability:

1. light coming through multiple ommatidia are summed together or
2. signal transmission gets slowed down until they overlap and increase in intensity. No matter what the mechanism, in places where rewards are present at night, Apis dorsata and A. mellifera adonsoni tend to stay up late and fly at very low light intensities.

## Subscription Rate Increase

I reluctantly have to pass on the information that this newsletter has been operating in the red the last two years. In order to be "self

ERIC MUSSEN  
ENTOMOLOGY DEPARTMENT  
UNIVERSITY OF CALIFORNIA

sufficient," a subscription is going to cost \$10 a year (\$1.67 an issue), beginning January 1, 2001.

You should consider, seriously, allowing your paid subscription to expire, if you have access to the Internet. This newsletter is posted on my Web page at the same time it goes to print for "hard copies" to be mailed. Is the website as dependable as the U.S. Postal Service? It hasn't been, as many people are aware. However, we are hiring a staff person specifically to make the Entomology page something people want to visit. My current issues are up in two formats, thanks to the efforts of my SRA, Mary Ann Montague. We are working on an Index, so that topics will be easier to find.

Sincerely,

ONE SHIELDS AVENUE  
DAVIS, CA 95616-8584  
[(530) 752-0472]  
[FAX (530) 752-1537]  
E-mail:ecmussen@ucdavis.edu  
URL:entomology.ucdavis.edu/  
faculty/mussen

Eric Mussen  
Entomology Extension  
University of California  
Davis, CA 95616