February 2003

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We would like to thank you for your subscription to this newsletter in the past. We are required to remove all those who do not make it known that they want to remain on our mailing list. THIS WILL BE YOUR LAST ISSUE OF THIS NEWSLETTER unless you contact the UCCE office to indicate that you would like to remain on the mailing list. Please let us know!

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Announcements

• RIA Annual Meeting and BBQ
The San Luis Obispo County Range Improvement Association will be holding its Annual Meeting & BBQ on Wednesday March 26, 2003 at The Tar Springs Ranch. Social Hour will be at 6:00 pm and Dinner is at 7:00 pm.

The cost of the BBQ dinner is $7.00. Membership dues are $3.00. Dan Dulitz will speak on the history of the RIA and controlled burns in San Luis Obispo County.

R.S.V.P. - 781-5940 by March 20, 2003

• Practical Streambank Restoration Workshops
Practical Streambank Restoration Workshops is the title of a meeting scheduled for April 8, 9 and 10, 2003, in Santa Maria. April 8 will be a classroom session devoted to “Design and Techniques.” On April 9, there will be a tour of “Local Projects.” The workshop will end April 10 with “Hands On” installation opportunities. The first day class fee is $30.00. Add day 2 for a total of $45.00. Attend all 3 days for a total of $70.00. Space is limited, so sign up early. For more information or registration contact: Tom Lockhart, Cachuma Resource Conservation District, 805/928-9269, ext.110, or e-mail: <tom-lockhart@ca.nacdnet.org>

• Three Short Courses
Roger Ingram, Livestock Advisor for Placer and Nevada County, has scheduled three short courses in which you may be interested.

1. Niche Markets for Meat Products Short Course
March 13-14, 2003, University of California, Davis. This short course would be of interest to producers of natural, grass-fed, and organic meats.
2. California Grazing Academy/Low-Stress Livestock Handling School  
April 25-29, 2003, Sierra Research and Extension Center, Browns Valley, CA  
Co-sponsored by UC Cooperative Extension and Sierra Research and Extension Center.

3. California Browsing Academy  
Sept 12-14, 2003, Sierra Research and Extension Center, Browns Valley, CA.  
Co-sponsored by UC Cooperative Extension and Sierra Research and Extension Center.

For more information on any of these programs, contact Roger Ingram at: 530/889-7385. E-mail: rsingram@ucdavis.edu or call Wayne Jensen (805/934-6240) for a copy of the registration materials.

Sudden Oak Death Symposium
CeRae MacAulay Speidel

The USDA Forest Service Pacific Southwest Research Station, The University of California Integrated Hardwood Range Management Program and Center for Forestry, and the California Oak Mortality Task Force held a research symposium on Sudden Oak Death December 15 – 18, 2002. It was designed to bring together the broad array of researchers and regulators from throughout the world to share information and describe the most recent research advances on this new disease. It featured 40 formal presentations, as well as over 50 posters, and was attended by 300 people from 13 countries and 26 states.

To date, *Phytophthora ramorum*, the organism that causes Sudden Oak Death (SOD) among other diseases, has not been detected in San Luis Obispo County. Starting in 1995, large numbers of oaks started dying along the northern coast of California and southern Oregon. Twelve California counties are currently confirmed infested including Alameda, Contra Costa, Humboldt, Marin, Mendocino, Monterey, Napa, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma. The farthest north confirmed location of SOD is near Garberville in Humboldt County. The farthest south confirmed location is in Torrey Canyon, south of Pfeiffer Big Sur State Park in Monterey County. The location farthest inland from the coast is in Solano County. Curry County in southern Oregon is also infested. The disease has also been detected throughout Europe in the Netherlands, Germany, Spain, Portugal, France, Poland, the United Kingdom, Italy, Sweden and Belgium.

*P. ramorum* affects a wide range of host plants. At the symposium, eight new species were added to the host list, which can be divided into 2 categories. The first category includes plants that are dying from the disease. They are California black oak, coast live oak, Shreve oak, tanoak, and canyon live oak. These host plants exhibit symptoms such as bleeding or seeping of a dark reddish brown viscous substance from the trunk and sometimes branches. Secondary symptoms of a diseased tree include reddish or tan-white fine, beetle boring dust, the result of bark and ambrosia beetles tunneling into the bark and/or wood, and the appearance of dome-shaped fruiting bodies of *Hypoxylon* fungus, which are green when new and later turn charcoal black. All three of these symptoms may be indications of other oak diseases such as the root rot fungus *Phytophtohora cinnamomi*, or the oak root fungus called *Armillaria*. Both of these diseases commonly affect oaks in landscaped settings where irrigation is used and/or the tree roots have been disturbed.

The second category of host plants are not necessarily being killed by the disease but show leaf spot and twig die back symptoms. They include rhododendron, California bay laurel, big leaf maple, madrone, manzanita, huckleberry, California honeysuckle, toyon, California buckeye, California coffeeberry, Arrow wood (in Germany, the United Kingdom, and the Netherlands), redwood, Douglas fir, poison oak, salmonberry, cascara, California hazelnut, Victorian box, Pieris, and Western starflower. It is thought that these understory plants are
important in that they allow for the rapid buildup of \textit{P. ramorum} spores and therefore serve as a source of infection. At the symposium several speakers emphasized the importance of California bay laurel in particular in the disease cycle.

Scientists are still uncertain about exactly how the disease is spread from one area to another, but think that wind, soil, water, wildlife, and human activity all play important roles.

There have been some promising results in trials evaluating response of infected oak seedlings, saplings, and mature trees to chemical treatments, suggesting these materials may be helpful in treating trees in a landscape setting. However, no chemicals have yet been registered for treatment of SOD and it is unlikely chemicals could be successfully used in wild land environments.

This new plant disease has the potential to impact nursery growers, shippers, the lumber and wood products industry, landscapers, and government programs. Nine countries now have regulations regarding movement of plant parts from species or genera that have been confirmed as hosts of \textit{P. ramorum}. These include the U.S., Canada, Germany, the Netherlands, the U.K., Spain, Korea, Australia, and New Zealand. In some cases, movement of soil that is suspected of being contaminated is also regulated. The European Union also has regulations.

If \textit{P. ramorum} is detected in San Luis Obispo County, we would be required to follow all applicable federal and international quarantines.

Currently, there is an annual monitoring program conducted throughout the state which uses aerial digital photography, aerial visual surveys, and ground visual surveys to look for suspect trees.

The most important monitoring tool we have is the general public. If you see a suspect tree, we ask that you call the Master Gardener’s. In the north county office, they can be reached at 237-3100 on Wednesdays from 8:00 – 12:00. In the San Luis Obispo office they can be reached at 781-5939 on Mondays and Thursdays from 1:00 – 5:00. They can help answer any questions you may have. If warranted, they will refer the tree to a biologist at the San Luis Obispo County Agricultural Commissioner’s office who may decide to come out to take a look at and sample the tree for SOD.

Information packets about Sudden Oak Death and the growing of oaks can be obtained from the Master Gardeners, the San Luis Obispo County Agricultural Commissioner’s office, or through the UCCE Farm Advisor’s office. The most current information can be found online at the following websites:

- [www.suddenoakdeath.org](http://www.suddenoakdeath.org)
- [http://cemarin.ucdavis.edu/index2.html](http://cemarin.ucdavis.edu/index2.html)
- [http://danr.ucop.edu/ihrmp/oaks.html](http://danr.ucop.edu/ihrmp/oaks.html)

More information about the Sudden Oak Death symposium can be found at:

- [http://danr.ucop.edu/ihrmp/sodsymposium.html](http://danr.ucop.edu/ihrmp/sodsymposium.html)

**New Drug for Pneumonia**

\textbf{Wayne Jensen}

Dr. John Maas, Extension veterinarian at UC Davis, has good news to report. The FDA has recently approved a new drug for the treatment of pneumonia. Pfizer’s new product, A180\textsuperscript{TM}, has been approved for use in beef cattle. This antibiotic is a member of a newer class of antibiotics, the \textit{fluoroquinolones}. There has been a fair amount of controversy about this class of antibiotics in human medicine and veterinary medicine circles. The controversy revolves around the concern that bacterial resistance to the fluoroquinolones will develop and result in the emergence of “Super Bugs.” These bacteria would be resistant to all fluoroquinolones. These bacteria could infect humans, and no effective therapy would be available. Those concerned postulate that using these antibiotics in food animals, such as cattle, would accelerate the potential of developing bacterial resistance. While this concern has theoretical potential, the practical potential is extremely small or non-
existent. This class of antibiotics is used routinely in human patients and in companion animal patients (including dogs, cats, and horses). These human patients and companion animals are in much closer contact with other humans than the products of food animals. The FDA has responsibility for determining the risk posed by this drug and has acted to approve it.

What is A180™?
It is a new antibiotic manufactured by Pfizer and approved for use in cattle for the treatment of respiratory disease caused by Pasteurella multocida and Mannheimia (Pasteurella) hemolytica. These are the most common bacteria that cause pneumonia in beef cattle. A180™ is the trade name that Pfizer uses for this compound. However, the actual drug is danofloxacin mesylate. The A180™ product is an injectable antibiotic and will be available in a multiple dose vial (250 ml).

How can you obtain this product?
This product will be available by veterinary prescription only. There will be no over-the-counter availability of this compound. Your veterinarian will write a prescription for you to obtain and use this product. Additionally, a valid veterinarian-client-patient relationship must be in place for your veterinarian to legally write this prescription. That means, you can’t call your brother-in-law in Montana, who is a veterinarian there, and have him write a prescription for your cattle. Your veterinarian will either dispense the A180™ to you or send the prescription to a licensed veterinary drug retailer or a pharmacy. Your veterinarian will determine that your cattle need to be treated with this product and will then write a prescription. He or she will also be responsible for any residues or other adverse reactions or consequences.

What will be the dose and route of giving this drug?
The new A180™ is an injectable compound and will be given subcutaneously at a rate of 1.5 ml (1.5 cc’s) per 100 pounds body weight. This will be an advantage for quality assurance (QA) reasons. The dose will be relatively small in terms of volume - about 10 ml for a 700-pound steer. Also, the subcutaneous route of administration will be very helpful for QA goals. The subcutaneous route makes it easy for the treatments to be given in the neck region. This is another plus for QA goals.

What will the withdrawal time be?
The withdrawal time (the time from the last treatment until the animal can be sold or slaughtered) will be 4 days. This is a relatively short withdrawal time and will be an additional benefit.

For what other disease problems can I use this drug?
NONE. This compound will be approved only for bovine respiratory disease caused by the bacterial listed above. You cannot use this drug for pinkeye or foot rot or other non-approved conditions. This is similar to another new antibiotic, Baytril® 100, which can only be used for bovine respiratory disease. Baytril® 100 is also a fluoroquinolone, and this is the reason the use of these drugs is more restrictive.

What are other drugs that are commonly used to treat pneumonia in cattle?
Some other compounds that are commonly used for this purpose include: LA200® (long-acting oxytetracycline), Biomycin 200® (another long-acting oxytetracycline), Nuflor® (florfenicol), Polyplex® (ampicillin), Excenel® (ceftiofur), Micotil 300® (tilmicosin), Naxcel® (ceftiofur), and several other antibiotic products too numerous to mention.

What class of cattle can be treated?
A180™ has been approved for beef cattle only. It will not be legal to use this drug in dairy cattle or in calves to be processed for veal. Along these lines, if you are not currently keeping records on drug use in your cattle, now is a good time to consider doing this on a routine basis. This product cannot be used in an extra label manner. That is to say, it cannot be used in sheep, dairy cattle, etc. It cannot be given intramuscularly, or intravenously. It cannot be used at different dosage rates or frequency from those listed on the label. The withdrawal time must be adhered to (4 days). It cannot be used to treat calf scours.
or other diseases not listed on the label. In other words, your veterinarian will not be able to write an extra label “prescription” for this product. It will be the responsibility of veterinarians and beef producers alike to use this new drug in a prudent and legal manner. We have a number of excellent compounds for the treatment of respiratory disease in cattle, and our responsible use in accordance with QA guidelines will ensure their future availability. Be sure to discuss this new drug and other cattle health questions with your veterinarian.

Bovine Tuberculosis in California
January 2003 Update
Wayne Jensen

In previous articles in our newsletter I have reported updates of the Bovine Tuberculosis situation in California. The California Department of Food and Agriculture (CDFA), United States Department of Agriculture (USDA), and the cattle industry continue to work together to control and eradicate bovine tuberculosis (TB) from California, and the following is a recent report I received.

As you are aware, bovine TB was confirmed in a Tulare County dairy herd in May 2002. The herd was quarantined by the CDFA, tested for TB three times, and all test-positive cattle were destroyed. All cattle sold from or associated with the herd over the last five years have been traced and tested. In November, the herd was sent to slaughter and the premises thoroughly cleaned and disinfected. The premise was released from quarantine after approval of the state TB epidemiologist.

A TB-positive cow was found at a California slaughterhouse during September 2002. The investigation into the source of this cow is ongoing, but indications are it was from a dispersed beef herd from Tulare County. A complete herd test of a dairy herd in Tulare County identified a single reactor animal in October 2002. While preliminary laboratory results are positive for TB, final culture results from a USDA laboratory are pending. As a precaution, the dairy was quarantined - the second herd quarantined for TB in California. The USDA classified this second quarantined dairy herd as an infected herd in December 2002.

To date, 152,875 cattle in 101 herds have been tested for bovine TB since this investigation began, and nearly 8,000 cattle have been slaughtered during this investigation.

Since June 2002, all dairy breeding animals more than six months of age leaving California need a negative TB test within 30 days of movement. This requirement does not apply to beef cattle at this time.

The USDA assigns various status levels to a state under the bovine TB eradication program: Accredited Free, Modified Accredited Advanced, Modified Accredited, Accreditation Preparatory or Non-Accredited. The USDA announced in December that California’s status will be downgraded from TB-Free to Modified Accredited Advanced because a second herd was identified within 48 months of the first herd. The State status will not change until this regulation is published in the Federal Register. This new status will require all California breeding cattle to have official identification and a negative TB test within 60 days of interstate movement, or originate from a TB Accredited-Free herd (mandatory annual TB testing), or move directly to slaughter. The USDA is currently reviewing its regulations used to determine a state’s TB status, and will publish a new regulation this year.

California is reviewing its TB control and surveillance options with the cattle industry. Current plans being discussed include:

1) Test all dairy herds in Tulare, Kings, and Fresno Counties.
2) Require a TB test before importing dairy cattle into California.
3) Develop agreements with neighboring states to ease annual testing requirements on “commuter cattle.”
Rainfall Records in Paso Robles

Royce Larsen

There is a lot of concern over rainfall in San Luis Obispo County, and in the entire west. However, it appears that we are in a normal cycle of dry and wet years. There was an average of 14.79 inches of rainfall in Paso Robles, CA from 1932 – 2002. This was based on the water year, rainfall from September 1 – August 31. Last year there was 8.32 inches, which is below normal rainfall. The minimum during his period was 6.36 inches in 1976. The maximum was 31.5 inches in 1969. For more information please see climate information at www.wrcc.dri.edu or www.cdc.noaa.gov. These web sites have current information on forecasting, el niño effects, as well as historical and current observations around the whole country.

Royce Larsen
Watershed/Natural Resource Advisor
San Luis Obispo and Monterey Counties

Wayne Jensen
Livestock & Natural Resources Farm Advisor
San Luis Obispo and Santa Barbara Counties

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