



# Alabama Vector Management Society

www.alabamavms.org

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June 2011

## 22nd annual meeting well-attended despite weather

Power outages, intense lightening and thunder couldn't put a damper on the speakers or limit the exchange of useful vector biology information at the 22nd annual meeting of the Alabama Vector Management Society held March 8th and 9th Orange Beach, Alabama. Book-ended by bad storms, 110 members still managed to attend.

Topics covered by the speakers included raccoon rabies, cockroach identification and control, Eastern Equine Encephalitis, tick-borne diseases, pesticide labeling and safety, bed bugs, the

ADEM General Pesticide Applicator Permit required for applying chemicals to or near water (see text box below right for link to permit information), invasive insects, prescribed fire's effects on tick populations, and updates from the Alabama Dept. of Public Health and the Alabama Dept. of Agriculture and Industries.

The evening banquet was held at the Orange Beach Community Center. The catered meal included a great shrimp boil and key lime pie. The society sincerely thanks these seven vendors for contributing funds to

cover the cost of the seafood dinner: **Univar, Valent, Central Life Sciences, Adapco, Clarke, Bayer Environmental Science, and Vector Disease Control, Inc.**

At the final business meeting, the membership voted to award Dr. Gary Richard Mullen with a lifetime honorary membership for his service to the field of vector management in Alabama. The membership voted on officer positions, which are covered in page 4 of this newsletter. We look forward to seeing you at the 23rd meeting of the AVMS in 2012!

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### Dates To Remember:

**June 26 - July 2, 2011**  
National Mosquito Control Awareness Week

**October 31, 2011**  
Deadline for obtaining NPDES Permit from ADEM

### **ATTENTION! NPDES Permitting Information for Alabama**

when applying pesticides at or near water for (a) Mosquito and Other Flying Insect Pest Control, (b) Weed and Algae Control, (c) Nuisance Animal Control, or (d) Forest Canopy or Other Area-Wide Pest Control, a permit will be required. (NPDES Permit No: ALG870000)

### **Permits will be required by October 31, 2011**

<http://adem.alabama.gov/newsEvents/notices/mar11/pdfs/3npdes-special.pdf>

See more information on page 5 of this newsletter.



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**The AVMS is grateful to have the support of 2010-2011 Sustaining Members**

| <b>Sustaining Member</b>     | <b>Phone #</b> |
|------------------------------|----------------|
| Central Life Sciences/Zoecon | 256-527-9904   |
| Gil Manufacturing Inc.       | 334-284-8111   |
| Univar USA                   | 251-666-5995   |
| AIPro Vector Group           | 888-603-1008   |
| ADAPCO Inc.                  | 888-400-9085   |
| Valent Biosciences           | 813-505-8852   |
| Clarke                       | 601-594-0305   |
| Bayer Environmental Science  | 919-549-2534   |
| Vector Disease Control Inc.  | 800-413-4445   |

**CODE OF ETHICS FOR MEMBERS OF THE  
ALABAMA VECTOR MANAGEMENT SOCIETY**

Preamble: The purpose of the Alabama Vector Management Society is to promote the management of public health pests and arthropod vectors of disease, provide for the educational and scientific advancement of members, encourage scientific research in vector management and public health pests, promote an exchange of information among members, and to extend and develop public awareness and interest in the discipline.

Public health pest and vector management provides services that are extremely important to the health, welfare and progress of society. Those employed in the public health pest and vector management profession have the responsibility to render effective and professional service to humanity, in keeping with high standards of ethical conduct. Therefore, in striving to advance and maintain the honor and dignity of the profession, the Alabama Vector Management Society (AVMS) has established

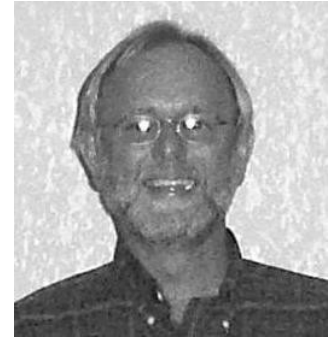
the following code to define the conduct and ethics due the profession. This code is binding on the membership of the AVMS.

AVMS members will use their knowledge and skill for the betterment of human welfare.

- Members will, at all times, strive to maintain the public trust, and advance the standards and principles established by the AVMS.
- Members will cooperate in the exchange of information and technology for the growth and progress of the public health and vector management profession and the AVMS.
- Members will not cause dishonor to the Society through their actions while representing the AVMS.
- Members will comply with all laws and regulations that apply to our science and profession.
- Members will promote solidarity, harmony and support among members and fellow workers. They will not undermine, vilify, berate or otherwise intentionally injure the work, accomplishments, efforts or professional reputation of another.
- Members will not conduct or in any way participate in a fallacious review of the work of a fellow worker or other member.

## Remarks from Dr. Fudd Graham, AVMS President

Hello to all the members of the Alabama Vector Management Society. I have been a bit behind since our meeting in Orange Beach and will take credit for our newsletter being a bit late this quarter. The first thing I want to do is thank Steve McDaniel, Jeff and Rachael Beck, Mark Tow, Drew Lockhart, Jennifer Wroten, Jason Carlee, Kelly Stevens, Dee Jones, Nathan Burkett-Cadena and several others who volunteered their time and efforts to make our meeting at the Fairfield Inn and Suites such a success. And we would not have been able to have such a productive meeting without our vendors who generously support our society and our efforts to provide a relevant educational opportunity for our members each year.



I am honored that you have given me the opportunity to serve as your president this year. I hope that I can be as productive, innovative and effective as Steve McDaniel was in his tenure as president last year. I also want to welcome the new officers and new members of our board of directors. I will depend on you this year for your guidance and support as we lead our society through the coming year.

As an organization, there are many challenges ahead of us. Not only do we have the normal suite of vector-borne diseases to deal with, the new emergence of bed bugs may impact us, as the public will probably view these as a public health pest. This may become more of a concern to the public after the news release that a small sample of five bed bugs from a hospital were found to be carrying two types of superbugs - methicillin-resistant *Staphylococcus aureus* (MRSA) and vancomycin-resistant *Enterococcus faecium* (VRE) - bacteria that are resistant to antibiotics and very hard to treat when there is an infection. To meet these challenges, we need to work as an organization to train and educate ourselves while keeping lines of communication open so we are up-to date on current findings and research in our field.

As with most organizations, there are also budget concerns. While the society is in sound financial shape after our meeting in Orange Beach, I realize that our state and local budgets are lean. That is why we are considering returning to the Fairfield Inn and Suites in Orange Beach for our meeting next year. The rates are reasonable and the location offers the opportunity to combine business with pleasure at a reasonable rate. Many stayed for a few days of vacation after our March meeting.

We are an organization of volunteers, with a great newly-elected Board of Directors and some excellent new additions. But, if you look down the list, you will see there are many officers and directors that have provided service to the AVMS for several years. We need more volunteer members, more energy, and new ideas to keep us a viable, well-educated, and vibrant organization. I will continue from time to time remind our members of the many areas where one can volunteer time, experience and expertise.

Thank you for the opportunity to serve this year.



**Dr. Gary Mullen, Professor of Entomology Emeritus, became an honorary member of AVMS at the 22nd annual meeting in March, 2011. We thank him for his support of our Society from its earliest days.**

# Meet your 2011-2012 AVMS board members

The board are those members of the society who have been elected by the membership to serve in various capacities. One of the primary responsibilities of the board is to work together to plan the annual meeting. Other duties include keeping the (financial) books, transcribing the minutes of meetings, and producing the quarterly newsletter. Positions such as president, editor, secretary and treasurer are elected annually, whereas director positions have two-year terms. Thanks to all of the past, present and new members of the board for your efforts in maintaining a thriving society.



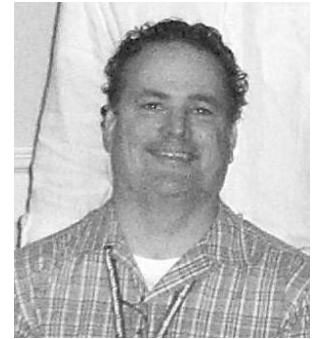
**Dr. Fudd Graham, President**



**Mark Tow, President-Elect**



**Leigh Salter, Secretary**



**Steven McDaniel, Treasurer  
and Past President**



**Ashley Lovell, Editor**



**Dr. Dee Jones, Director**



**Jason Carlee, Director**



**Jennifer Wroten, Director**



**Kelly Stevens, Director**

## Armadillos linked to leprosy in humans

According to an article published in the *New England Journal of Medicine* (364:1626-1633, April 28, 2011), researchers have discovered using genetic sequencing that armadillos infected with leprosy and some human patients diagnosed with the illness share a common strain of a leprosy-causing bacteria.

The finding provides the strongest evidence to date that armadillos could transmit the illness to humans, according to the study. Armadillos can be found in 10 U.S. states, and are the only animals other than humans that have been shown to be carriers of leprosy.

To preview the article for free, visit

<http://www.nejm.org/doi/full/10.1056/NEJMoa1010536>



## EPA's request to extend National Pollutant Discharge Elimination System (NPDES) permit deadline granted by federal court

On March 28, 2011, the U.S. Sixth Circuit Court of Appeals granted EPA's request for an extension of the deadline for when permits will be required for pesticide discharges into U.S. waters from April 9, 2011 to October 31, 2011.

At that time, all operators who discharge to waters of Alabama from the application of (1) biological pesticides or (2) chemical pesticides that leave a residue, when the pesticide application is for one of the following pesticide use patterns: (a) Mosquito and Other Flying Insect Pest Control, (b) Weed and Algae Control, (c) Nuisance Animal Control, or (d) Forest Canopy or Other Area-Wide Pest Control will be required by the Alabama Department of Environmental Management

(ADEM) and the Environmental Protection Agency (EPA) to hold a general NPDES permit.

This permit follows the Sixth Circuit Court of Appeals decision in *National Cotton Council, et.al, v. EPA*.

Eligible operators must submit a notice of intent (NOI) to ADEM if they exceed the annual treatment thresholds detailed in the table below. For more information and calculation parameters, contact Dale Mapp at ADEM at 334-394-4399 or [dpm@adem.state.al.us](mailto:dpm@adem.state.al.us). Or visit <http://adem.alabama.gov/newsEvents/notices/mar11/pdfs/3npdes-special.pdf>.

### Customizable Disease Carrying Insect Education and Outreach Materials

A partnership of the American Mosquito Control Association  
and the Fairfax County Health Department

By providing high quality information to your residents, your program can gain community support while helping residents to deal with mosquitoes and ticks.

The AMCA has launched a new program that allows mosquito control districts access to customizable outreach materials. These materials include calendars, children's books, temporary tattoos, educational brochures, and more.

Customize your organization's own logo and contact information!

<http://www.allenwayne.com/skeeter/index.cfm>

| Annual Treatment Area Thresholds |   |  |
|----------------------------------|---|--|
| PGP Part                         | Pesticide Use                                   | Annual Threshold   |
| II.B.1                           | Mosquitoes and Other Flying Insect Pest Control | 6400 acres of treatment area   |
| II.B.2                           | Weed and Algae Control:                         |  |
|                                  | - In Water                                      | 100 surface acres of water   |
|                                  | - At Water's Edge:                              | 100 linear miles of treatment area in waters of the State or at water's edge |
| II.B.3                           | Nuisance Animal Control:                        |  |
|                                  | - In Water                                      | 100 surface acres of water   |
|                                  | - At Water's Edge                               | 100 linear miles of treatment area in waters of the State or at water's edge |
| II.B.4                           | Forest Canopy or Other Area-Wide Pest Control   | 6400 acres of treatment area   |



## Rabies and raccoons in Alabama: an update

Since intensive oral rabies vaccination (ORV) efforts were conducted in central Alabama in 2005, new rabies cases in raccoons and foxes have popped up in Elmore and Autauga counties, areas that were considered to be raccoon-rabies-free. The USDA is considering these positive cases as "breaches" of the Alabama-Coosa river system, a natural, geographic "barrier" for the endemic occurrence of raccoon-variant rabies within Alabama.

Currently, USDA Wildlife Services and the Alabama Department of Public Health (ADPH) are working to identify the extent of the recent outbreak using trapping, night surveys, and enhanced surveillance of reportedly sick or dead animals.

Meanwhile, plans are underway at the national level to administer more ORV baits to these areas to stop the further migration of the disease and eliminate it from the area. Baits will likely be distributed with helicopters and targeted toward dense raccoon population areas. To guide this process, intensive studies to determine raccoon population densities in habitat representative of these areas are being planned.



Graphic by USDA APHIS WS

**Location of 2004 and 2005 distribution of ORV baits in Central Alabama.**

**Report sick carnivores from yellow areas in map at right to your local CHD or**

**USDA WS  
1-888-RABIES4**



## AVMS editor's husband victim of tick bite



Graves Lovell, a fisheries biologist with ADCNR, was thankful his wife Ashley was familiar with the tell-tale signs of erythema migrans. Thanks to her 11-year membership in AVMS, she recognized this rash when it appeared in the summer of 2010 and took him to the doctor for treatment. He was likely exposed to the tick while electrofishing in the streams of Central and South Alabama. He completed a 3-week course of doxycycline and seems to be symptom-free.





## Vector Spotlight

**SCIENTIFIC NAME:** *Procyon lotor*

**OTHER NAMES:** Masked Bandit

**DESCRIPTION:** Raccoons (*Procyon lotor*) are medium-sized and stocky-built animals (23.7 to 46.5 in.) with long bushy tails that have five to seven black rings. The head is broad in the rear and narrows to a short, pointed nose. The feet have hairless soles and claws that are non-retractable. Raccoons are similar to humans in that they are plantigrade, a term used to describe animals that walk on the soles of their feet. The front feet have long, thin flexible fingers that are opposable to some degree and are very sensitive to touch. They have the capability of grasping or holding onto food or other objects. The face has a very noticeable black mask across the eyes and cheeks that is outlined with white. The fur is a coarse gray, brown, and black with lighter shades on the sides.



Photo by Ashley Lovell, USDA Wildlife Services

**DISTRIBUTION:** *Procyon lotor* is a common mammal found throughout Alabama and the United States except for the Rocky Mountains and deserts of the Southwest.

**HABITAT:** Raccoons inhabit areas such as bottomland hardwoods, swamps, pine/hardwood forest, farmlands, wooded residential areas in cities and towns, and other areas that have a supply of den trees, food and water. Den areas can be found in hollow trees, rock crevices, under tree roots, and burrows of other animals. They are relatively scarce in dry upland woodlands and southern pine forests.

**FEEDING HABITS:** Raccoons are omnivorous and opportunistic feeders. They will feed on plant material such as wild fruits, berries, acorns, nuts, corn, and garden vegetables. Their diet will also include insects, crayfish, frogs, fish, bird and turtle eggs, snakes, and small mammals. In urban areas and city parks they will also forage in trashcans and garbage dumps. The raccoon's Latin name, *lotor*, means "the washer" and refers to the perceived habit of dousing food in water before eating it. Recent studies indicate that this behavior is only common in captive raccoons and seems to be a substitute for the dabbling process used in searching for prey in aquatic habitats.

**LIFE HISTORY AND ECOLOGY:** Raccoons begin to mate as early as December to as late as August, with a peak in the mating season around February and March. The gestation period is 63 days and most young are born between April and August. Females can have one to seven young per year with an average of three to four. The young are weaned and begin to leave the nest to forage on their own at the age of 10 to 12 weeks. Females are able to breed at about one year of age and males not until their second year.

### REFERENCES:

John A. Sealander and Gary A. Heidt. 1990. *Arkansas Mammals*. The University of Arkansas Press, Fayetteville. 213 pp.

**AUTHOR:** Phil Miller, Wildlife Biologist, Alabama Division of Wildlife and Freshwater Fisheries. Reprinted with permission from <http://www.outdooralabama.com>

## ALABAMA VECTOR MANAGEMENT SOCIETY MEMBERSHIP FORM

NAME: \_\_\_\_\_

AFFILIATION: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY, STATE, ZIP: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

E-MAIL \_\_\_\_\_

Mail Membership form to:  
Steven McDaniel  
P.O. Box 3093  
Montgomery, AL 36109

☐ MEMBERSHIP ONLY (2011-2012 DUES) \$10.00

☐ STUDENT MEMBERSHIP ONLY (2011-2012 DUES) \$5.00

AMOUNT ENCLOSED \_\_\_\_\_

**MAKE CHECKS PAYABLE TO: Alabama Vector Management Society**  
*I UNDERSTAND THAT, AS A MEMBER OF THE AVMS, I AM EXPECTED TO  
ADHERE TO THE AVMS CODE OF ETHICS*

For Vendor Information Contact:

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