

LEE COUNTY MOSQUITO/HYACINTH CONTROL DISTRICTS



Newsletter

September, 2011

Future Important Dates for your Calendars:

Sept. 2nd: Safety Mtg., 7:30 am

Sept. 8th: Board Meeting, 4:30 pm

Sept. 14th: Flu Shots, Baily Bldg., 7:30—9:00 am

Sept. 15th: Board Meeting, 4:30 pm

Supervisors' Meeting—Sept. 27th—2:30 pm

Pilot, Rita Maiss flew Dave Soltez—from Earth Friendly Technology, LLC—to all “powered” heliports. As a Master electrician, he gathered data for the installation of solar panels. George Baker flew along to assist Dave. The installation of solar panels will reduce power costs and is part of a program to encourage non-profit organizations to utilize solar energy. Panels are scheduled for installation this month.



The month of August brings the yearly required classes for our #5 HazMat personnel to maintain their license for a hazardous spill. George Baker, Don Claytor, Brian Cotterill and Gary Skelton are the team that represented our district



Dick Baker dipping for larvae in No. Ft. Myers at Jack's Marina.



Richard Daugherty and Clyde Nabers on Boca Grande.



Robert Hedrick dipping for larvae on Pine Island.



Sandy Martin taking care of sentinel chickens.

Photos by Rita

Busy Season—Hard-working personnel.

Field Activity — 2011

ACRES TREATED	GROUND ADULTICIDING	AERIAL ADULTICIDING	GROUND LARVICIDING	AERIAL LARVICIDING	SERVICE REQUESTS
January	0.0	0.0	7.4	84.9	6.0
February	11,009.8	0.0	16.0	1,446.9	79.0
March	6,272.4	14,783.5	20.3	2,931.0	69.0
April	44,439.7	36,860.4	29.6	1,667.8	542.0
May	28,161.3	134,648.3	36.4	5,712.5	1,693.0
June	64,207.3	173,968.4	116.5	12,952.3	2,146.0
July	119,422.8	721,914.6	427.2	32,730.0	2,975.0
August	104,895.1	422,007.3	529.7	23,039.3	1,316.0
September					
October					

Jim Burgess—Mosquito Disease Surveillance: Lee County Mosquito Control District started its disease surveillance in 1978 after having our first three human St. Louis Encephalitis (SLE) cases late in 1977. Our Disease Surveillance Program consists of three parts: sentinel chickens, mosquito trapping and laboratory support. In our lab support, we do rtPCR testing on adult mosquitoes for the presence of West Nile Virus (WNV), Dengue Virus (DEN) and SLE. Our lab tests the sentinel chicken sera for the presence of anti-bodies for Eastern Equine Encephalitis (EEE), SLE and WNV. We are the only mosquito control district in the State of Florida that does its own sera testing. In 1983, we started using the antibody test called Hemagglutination and Hemagglutination-Inhibition (HA/HI). This test was fast (results in 24 hours) and easy to perform. However, this test required some products that have to be made in a Biohazard Level 3 Laboratory. Our district's lab is only a B L2 lab, but we were supplied these products by the Centers for Disease Control Disagnostics Reference Branch. In 2010, our district was given notice that a newer and better test was now being used by the CDC and the HA/HI test was no longer being performed. Therefore, that was the end of our supply of some needed products for HA/HI testing. We looked at many options from upgrading the new lab to using some of the newer and better tests. It was decided to start using the new Enzyme-linked Immunosorbent Assay (ELISA) or also known as Enzyme Immunoassay (EIA).

Our district had Milton Sterling, Biotechnology Specialist, attend a three-day training in ELISA testing at Florida Gulf Coast University (FGCU) and while there, he picked up rtPCR training for DEN testing. Now with some background understanding of the ELISA, Milton then spent a week at the FL Dept. of Health Lab in Tampa, learning how the FDOH lab uses the ELISA test on sentinel chickens. It was found that they only test about a dozen chicken sera a week. While comparing notes with some other labs, it was determined that the lab at Sacramento-Yolo Mosquito & Vector Control District in California was doing 90-100 samples in a day. We arranged to have Milton visit their lab and learn how their district was able to test that much chicken sera in a week. Upon returning from California in July, our lab was set up for ELISA testing and the first successful ELISA test for SLE and EEE was performed during the last week of July. Finding avian WN ELISA test kits proved to be difficult because some products for this test are specific to that animal whose sera is being tested. The first good WN ELISA test was performed in mid-August and we finally were successful. Chicken sera that FHOH had found positive for WNV antibodies were tested and Lee County's lab results matched FHOH results 100%! We are proud to say, Lee County Mosquito Control District now has a functioning ELISA Lab that can test for WNV, SLE and EEE in sentinel chickens.

