

Birding & Bio-Lab
Annual Report for: 2011
East Baton Rouge Parish
Mosquito Abatement District
by: Wm. Fred Augustine Jr.
Mosquito Control Specialist

Birding: There were 1339 birds trapped and blood samples collected from each bird. They were processed and sent to the diagnostic lab at the LSU Veterinary School of Medicine for testing. Of the 1339 blood samples tested there were a total of 6 which tested positive for West Nile Virus.

Those testing positive were as follows:

Trapped and bled: 1/25/2011; House Sparrow *Passer domesticus*;
site: Southern Swine Unit

1/28/2011; Purple Finch *Carpodacus purpureus*;
site: Burbank Soccer Complex

2/10/2011; Slated colored Junco *Junco hyemalis*;
site: Hooper Rd. Park

2/11/2011; Field Sparrow *Spizella pusilla*;
site: Comite Dr. (Misty Oaks)

7/22/2011; Northern Cardinal *Cardinalis cardinalis*;
site: Hoo Shoo Too Rd.

8/4/2011; Northern Cardinal *Cardinalis cardinalis*;
site: Greenwell Springs Park

There were 34 different species of the 1339 trapped. The count of the three species with the most importance and all other species trapped and bled are as listed:

Northern Cardinals: 416
Cardinalis cardinalis

House Sparrows: 429
Passer domesticus

White throated Sparrow: 50
Zonotrichia albicollis

All others were from 31 different species: 444

The birds divide up according to sex as listed:

Male: 491

Female: 581

Unknown: 267

The ages of the birds divide up as listed:

After-hatch-Year: 251

After-second-Year: 10

Second Year: 338

Hatch Year: 740

There were 32 different sites trapped throughout EBRP in which most were trapped multiple times during 2011. There were 21 birds that were recaptured. These were identified by an aluminum band that was previously placed around one leg when captured. We (EBRMARC) possess a bird banding permit from the Bird Banding Laboratory, which is within the USGS (United States Geological Survey), located in Laurel, Maryland. Our permit is kept current by supplying all birding data annually and the permit

is renewed every third year. Not all of the birds were banded – the birds banded are according to species that have a high level of infection rate of a virus (West Nile, Eastern Equine, or St. Louis), plus a large number are banded from sites that are more adaptable to a virus, and most migratory species are also banded that are studied by the BBL. When a bird is captured it is identified by species, aged, sex determined, date captured, band number logged, and site captured at. This data is kept for our own records for future reference and also sent to the BBL for their ongoing study.

Bio-Lab *Insectary*: The lab maintains three mosquito colonies that are used in various test (testing of certain insecticides, etc.), studies (our own, and mosquitoes are supplied to Entomological students for their degree projects), and used as an educational tool (displays at Health Fairs, Libraries, Classrooms in EBR, and other educational events). The *Culex quinquefasciatus* and the *Aedes aegypti* colonies were steady in their progress (numerical growth) throughout most of the year, although the *Culex* colony struggled in the late summer, but turned around there after. There was one *Aedes albopictus* colony that was reared up during the year, but ultimately didn't survive due to adverse conditions, but there are plans to start another colony when warm conditions allow us to.

Several of the mosquito rearing cages was cleaned and the sock cloths replaced on each of them. The lab has two mosquito rearing rooms which have large cages (24"x 24") and emergence cages (12"x12"). The rooms are maintained at around 80 degrees Fahrenheit and around 50 – 80 % humidity. During 2011 we did a sizeable upgrade to the *Aedes* mosquito room by replacing the paneled walls from a nonresistant moisture paneling to a moisture resistant paneling. The entire flooring was replaced in the lab with laminated type flooring due to long term wear and tear.

Mosquito rearing Kits that we build here at EBRMARC are used for educational purposes. These kits are used for displaying mosquito larvae and adult mosquitoes at public events. These are also supplied to schools, if requested, and mosquito eggs, instructions, and other necessary materials with the kits are supplied. A class can observe the life cycle of a mosquito from day to day. During 2011 there were very few distributed, but several were used for field testing purposes by EBRMARC workers.

Educational Events: I (Fred Augustine) assisted in a number of public educational events: Health Fair – Gus young community Center; Health Fair - Chaneyville Health Unit; Earth Day; Red Stick Ready - Mall of Louisiana; and Health Fair - East Washington St. Community Center. I attended the AMCA (America Mosquito Control Association) Conference in March, which was held in Anaheim, California. I attended the LMCA (Louisiana Mosquito Control Association) meeting in Covington, La. in November.

W. **Frederick** Augustine Jr.
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