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Where are the Meadowlarks?

By John Monroe

One of the more pleasant ways to enjoy Windrush is a long, quiet walk through its forested trails or along the perimeter road surrounding the fields of grass and experimental crops, with a pair of binoculars and a guide to identifying birds. In the forty-one years we have lived here on the place, Frances and I have engaged in this entrancing pastime with, from time to time, more or less intensity. I would not say that we are bird-watchers (or to use the modern term, birders) because if we were judged on any scale of knowledge, activity or depth as compared to the real authorities, we would rate low. Although we did keep lists of what we saw for a few years (long ago), most of our birding experiences, and the best ones I think, can be described as a communion with nature looking around to see what we can see. Even if not deliberately done, it would be hard not to notice and marvel at the variety of birds here at Windrush. Just look out of the window or sit on the porch or patio early in the morning or at sunset and you will be surrounded by the sounds and sites of these feathered creatures.

Some of my favorites are quite common. The smartly dressed Towhees, male in black and female in brown, are pleasant little ground dwellers. Wood Ducks are skittish and will drop into our pond early in the morning but leave when the traffic gets too annoying. Chimney Swifts are entertaining acrobats every evening. We have a false chimney that we let them nest in but have put a cap over the real one.

There is just enough of a challenge to identifying birds in the wild to be rewarding. Just getting a good look at birds that rarely leave their leafy hiding places in the tops of trees can be difficult. Studying and remembering identifying markings (wing bars, eye rings and stripes, barred tails) as well as size and colors is worth some effort as often only a fleeting glimpse is offered before the bird is gone.

Replacing the term bird-watching with birding makes sense. Identifying birds by sound rather than by sight can be easier. Listening is an art that few master, but many bird calls are so distinctive that, once learned, they can identify the bird with absolute and instantaneous certainty. The Yellow-Billed Cuckoo hides high in the tops of trees, out of sight, but its call is unmistakable. Barred Owls emit the old familiar hoot owl sound we learned as children, but they are hard to spot since they rarely move except at night. Prothonotary Warblers are easy to identify either by sight or sound. Their bright almost solid yellow color is distinctive. Their call as well is unmistakable even heard deep in the woods, out of sight.

Observing birds in the same place over a long period of time will eventually result in knowledge of species that are common, and as a result the ability to recognize when something unusual is seen. A pair of swallow-tailed kites once circled over the fields prompting a visit from noted LSU expert Dr. George Lowery in hopes of a sighting. A pair of pileated woodpeckers nested in a dead tree stump across the pond from our sun porch.

There are birds one would expect to see but does not. I have never seen an English sparrow, common though it is, near my home. They must prefer urban environments.

Steele Burden often talked of leaving parts of Windrush in woods, undeveloped. "It is best left to the birds" he would remark. He designed lakes and ponds to attract bird life with islands for safe nesting. Herons, Egrets, Wood Ducks and our growing colony of Canada Geese are the result.

Perhaps more interesting than rare birds are those that once were common but now are not. The song of the yellow-billed Cuckoo is no longer heard, whereas twenty or thirty years ago it was common. Purple martins soared over the lakes in the past but now seem to be only passing visitors. A walk along the perimeter road around the fields was always accompanied by a meadow lark, flying ahead in bounds, leading the way. Now it is only seen on rare occasions if at all. Something must have changed but whatever it is remains a mystery.

Where are the meadowlarks?



Photographs by:
Lynda Waguespack



Reflections from the Chair

By Penny Miller, Chairman

Remember the Master Plan? I know, it's been over a year since we've mentioned it in this newsletter, but that doesn't mean it's forgotten. To refresh your memory, early in 2009, the Portico Group of Seattle, Washington, with input from representatives from LSU AgCenter, the Burden Foundation, the RLM, the community, and Burden Center, designed an extensive long-term Master Plan to develop Burden Center to its full potential as a horticultural, educational, and nature center for our area. (Check the Home Page of www.BurdenHorticultureSociety.com for the design.) By the end of that year, the plan was approved by the Burden Foundation and the LSU AgCenter but was put on hold due to LSU cutbacks and the general economy. However, this past November, Chancellor Richardson encouraged us to proceed, so we contacted NCDS of Atlanta, the same firm that helped the RLM with their capital campaign, to assist us. Their counsel is to begin with a feasibility study to determine first, if this plan we think is so wonderful would be supported by the larger community. As soon as the preliminary work is completed, we will be presenting a concise package describing the Master Plan and its benefits to selected people in the community who can help us determine if there is enough interest and support to conduct a capital campaign. The results of the feasibility study should be available by this fall.

In the meantime, we are still busy promoting Burden Center with a variety of activities and projects. The **C. C. Lockwood Photography Workshop** attracted many newcomers to Burden Center. The results of their work was viewed at a reception and then displayed in the rose garden during the **Art in the Garden and Wine Tasting**, a fun evening of meeting new people while sipping wine, nibbling appetizers, and enjoying an enchanted setting. A second **Hayride Tour of Burden** introduced more new people to Burden Center, and I encourage you to use this opportunity to bring others. We avoid the hottest part of the year so the next two rides will be in September and November. In June, the **Burden Center Garden Festival**, formerly Burden Field Day, provided a great opportunity for consumers, home gardeners, chefs and growers of vegetables, fruits and ornamentals to learn about recommended horticultural crops. Speaking of learning opportunities, lectures for **Reflections in the Garden** has a very loyal group of followers and continues to attract new members.

Focusing on children, **Project Learning Tree at Burden Center**, the docent-lead environmental education program for school children, finished its first year with great reviews from teachers and students. Please see page 6 for the article on Jim Barry and his phenomenal work in moving this project to new levels. **Trees and Trails** are open seven days a week for your enjoyment. Each month offers different sights. Improvements, though sometimes slow in coming, are constantly being made. Most noteworthy is a boardwalk off the Black Swamp trail that will be built this summer and provide a spectacular view of the swampland. You can find a map for it under Trees and Trails on the Attractions page of our website. The boardwalk will be located near the Palmetto Garden end of the Black Swamp trail.



Left top and bottom: Images from participants in the C. C. Lockwood Photography Workshop.

Right top: Sherry Eubanks and Julie McCarthy serving beverages at the Art in the Garden and Wine Tasting event.

Right and bottom: Photographs of the Art in the Garden and Wine Tasting event.



Reflections from the Chair

...continued

Except for Reflections in the Garden, July and August are a time to slow down, but come September 24-25, get ready for the annual **Pumpkin Patch and Corn Maze** fun family weekend when we partner with the Rural Life Museum's Harvest Days. Plans are to open the Corn Maze for selected hours the weeks following the big weekend – we're thinking scout trips, birthday parties, and other group activities would be fun. Please call Burden Center (763-3990) if you're interested.

The purpose of BHS is to promote Burden Center and thus these many activities. Please help us by spreading the word, bringing a friend, giving a financial gift, or volunteering to help with an event. The Master Plan will take years, but the more people who know about Burden, the easier and faster it will happen.

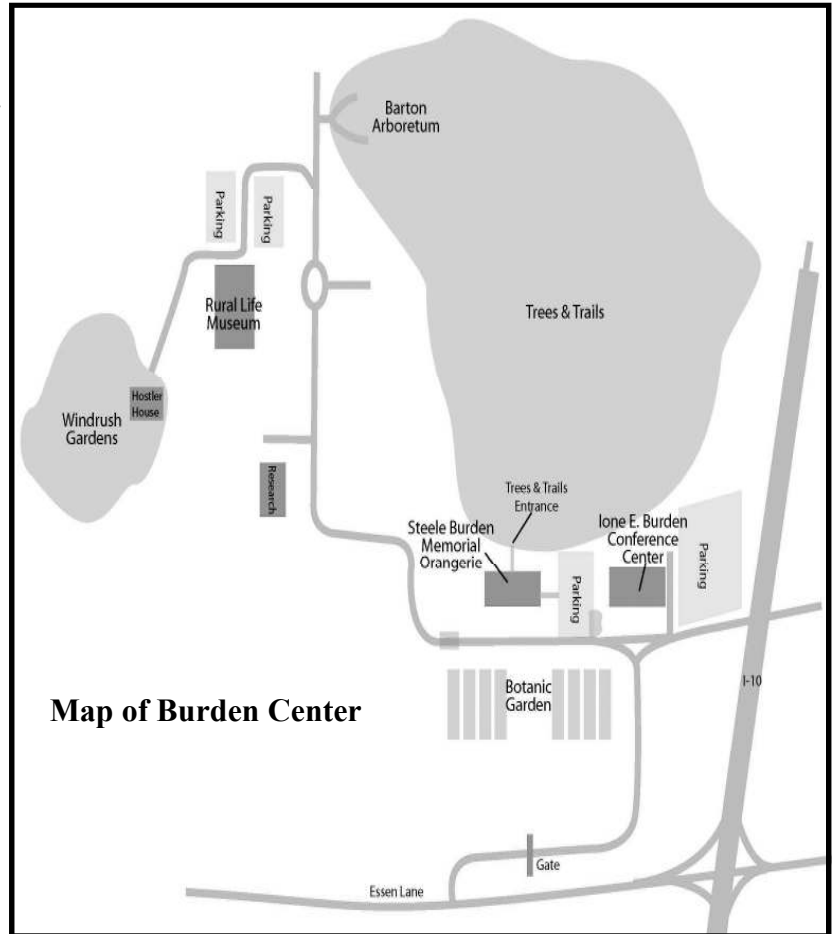
See you where the grass is greenest.....

HOLD THE DATE!

On Sunday afternoon, November 6th, the Burden Center Music Series will present the popular John Dupaquier Trio. The musical will be held in the Orangerie from 3-4 p.m.

Guests are encouraged to tour the grounds from 2:00 until time for the program.

Charge: \$10 adults; \$5 students.



“Reflection in the Garden”

Lunch Series

Noon to 1:00 PM in the Ione Burden Conference Center

Special guest speakers! Bring a brown bag lunch! Drinks will be provided!

July 11 *	Bob's Best for the Rest of the Summer & Fall Bob Souvestre
August 1	Gardening Green: Low Input/High Output Dan Gill
September 12*	Shady Gardening in Louisiana's Capital City Marion Drummond
October 3	Cool Colors for the Fall Garden Bill Rountree
November 7	Bringing Mother Nature Inside for the Holidays Emily Stich
December 5	Grow Your Own Fruit for Stocking Stuffers Charlie Johnson

*2nd Monday due to holiday



Digging in the Dirt

By Jeff Kuehny



I decided the next series of articles for this column should be from different scientists working at Burden Center and just what they are doing while “digging in the dirt”. The scientist highlighted in this article is Dr. Bret Elderd. Dr. Elderd received his Ph.D. from the University of California, Santa Cruz. He is currently an Assistant Professor in the LSU Department of Biological Sciences and his research focuses on examining how disease outbreaks, community structure, and irregularity influence insect populations. Read on for some very interesting research that will have a significant effect on the food you eat and the garden you grow!

Many garden, crop, and forest pests go through boom and bust periods. In some years, they are nowhere to be found; while in others, they cause a great deal of damage. The bust periods, particularly for lepidopteran larvae or caterpillars, are usually the result of a lethal disease that runs rampant through the caterpillar population. The disease is caused by a virus known as a nucleopolyhedrovirus (NPV), which can be and often is species specific (i.e., it only kills one type of caterpillar). Given that NPVs are naturally-occurring and ubiquitous in nature, they represent an ideal arena to ask a variety of interesting questions. These questions range from those involving basic research on disease ecology to applied questions on the use of these viruses as potential bioinsecticides.

Research at my laboratory on LSU's main campus and in the field at the Burden Center seeks to understand how these diseases control the dynamics of outbreaking pest populations. We use field and laboratory experiments to construct mathematical models of disease dynamics. By combining field data with mathematical models, we can estimate how quickly the disease spreads from individual to individual and, thus, predict the severity of a disease outbreak. While an epizootic, an epidemic in animal populations, is tragic from the pest's perspective, it can be a boon to a farmer. For instance, if the pest population is about to collapse due to an epizootic, there may be no need to spray a conventional insecticide - saving both time and money, while reducing the use of chemicals in the environment.



My lab focuses on the fall armyworm, *Spodoptera frugiperda*, a voracious pest of many grasses and crop plants in the Southern United States, and its NPV. The fall armyworm annually invades Louisiana from Florida and Texas as spring time temperatures increase. Louisiana winters are too cold for this pest. Typical of many lepidopteran species, fall armyworms also go through boom and bust cycles. In fact, last year was one in which fall armyworm populations were quite large.

The fall armyworm populations after going through a boom phase will crash -- most likely due to NPV. The way this occurs is not a pretty sight. In order for a fall armyworm to become infected, a caterpillar must consume/eat the virus, which resides on the plant's leaf surface. Once the caterpillar consumes enough virus, it becomes infected and the virus replicates within the caterpillar. Eventually, the caterpillar becomes just a bag of virus. The outer membrane of the caterpillar's skin then ruptures spreading more NPV onto the plant's leaves. The next group of caterpillars eat the leaves along with the new virus particles, become infected, and the cycle continues.

Since the plant and the virus have to be consumed at the same time, the plant and its chemical makeup can be important in determining how much virus a fall armyworm needs to eat to become infected. This, in turn, determines whether or not an epizootic will occur. Differences in infection rates can be seen if the fall armyworm is fed virus on leaves from different plants. While there are differences in infection rates between plant species, there can also be differences within a plant species, which our research has shown. This is most likely due to changes in the amount or type of chemical compounds within the plant's leaves. Within a plant species, leaf chemistry can be determined simply by whether or not an insect previously ate some of the plant. These chemical differences arise because of compounds produced by the plant that deter future consumption. These compounds make the plant taste bad. In fact, many plants produce chemical compounds to fend off pests. While some of these compounds exist in the leaves from the time the plant is a seedling, other compounds may be too expensive from the plant's perspective to produce unless there are pests about. Once the insect begins feeding, the plant increases the production of these induced chemicals. For example, members of the mustard family will produce more mustard oils if pests consume their leaves. However, these compounds can also decrease the ability of the NPV to spread through the population.continued on page 5.....

A Tribute to Judy Weaver

By Ginnie Bolin



It is with mixed emotions that many friends, fellow volunteers, and the faculty and students of University Terrace Elementary School (UT) are saying their goodbyes to Judy and Mark Weaver. While they will be missed, everyone is proud that Mark has been appointed to a newly created endowed chair at the University of Southern Alabama.

Judy had a distinguished career before coming to Baton Rouge. She was the chief executive of the Alabama State Television from 1989 to 2000. Since 2001 she has been a partner in NETA Consulting, an executive search firm for

public television.

During her five years in Baton Rouge, she has been an active volunteer in many organizations in addition to the Burden Horticulture Society (BHS). Through her involvement with the Master Gardener Program and the University Methodist Church, she helped initiate and maintain children's gardens at UT. For the last four years she has mentored UT students with their academic studies and worked with fifth graders and 4H groups in maintaining six separate gardens at UT. When she chaired the Publicity Committee for the Master Gardener Plant Sale, the sales increased significantly. Her volunteer work with her sorority Zeta Tau Alpha has included accepting positions as House Advisor, Academic Achievement Advisor, and member of the House Corporation.

BHS is losing one of its most ardent and effective supporters, who has served as Publicity Chair and as a board member. Judy is respected by all in BHS who have worked with her for her humility, graciousness, and generosity. Her organizational and communication skills have helped propel BHS from its infancy to the viable organization it is today. BHS wishes Judy and Mark much happiness in their new home.

Thank you Judy!

**Please check our website for new activities, updates and changes as so much depends on the weather.
www. BurdenHorticultureSociety.com**

Digging in the Dirt.....continued from page 4

For the fall armyworm, the caterpillars need to consume more virus to become infected if these chemicals increase. This is likely due to an interaction between the plant's defensive compound and the virus when the caterpillar ingests them together. The degree to which this occurs will determine whether or not an epizootic occurs and, thus, affect the population dynamics of the fall armyworm.

Little work has been done examining these interactions and this is one of the questions that my lab is currently addressing in the fields at Burden Center. If we can quantify how plant chemistry dictates disease outbreaks in pest populations, we can gain a better understanding of how various environmental factors determine whether or not an epizootic will occur. In turn, this may lead to better predictions of when those boom and bust cycles occur. Thus, our research will help farmers and maybe someday homeowners to reduce the amount of insecticides they must use to prevent caterpillars from eating the crop in the field or home garden.***

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Jim Barry Leads Project Learning Tree

By Phillip Wright

The contagious passion of Jim Barry is evident at every session of Project Learning Tree (PLT), a BHS program offered to school age students. As volunteer coordinator, he schedules the 30 volunteer docents as well as leading one of three interactive learning stations.

Before PLT, Jim worked for 25 years with British Airways. He was regional airport director for Chicago, Detroit, Houston, and Dallas/Ft Worth. This was quite an adventure for someone from Crowley and McNeese State in Lake Charles.

Jim says proudly, "I've lived in Houston, San Francisco, and Chicago. That's a career of living on airplanes. It was a wonderful career that allowed me to see the world."

"If anyone would have asked me what I'd do in retirement, this time at Burden would not have been it," a smiling Jim remarked.

However, last year he enrolled in the three month Master Gardener program at La House on the LSU campus. A class of 17 met each Thursday from 8:30 AM to 3:00 PM. And that path led to Burden. Another program is being offered beginning in July. Yes, there is a Master Gardener course at Burden also.

Docent Lora Taylor met Jim in the class. She had retired after 35 years at Woman's Hospital. Lora mused, "Working with the kids here at Learning Tree is a perfect fit for me." Jim added, "Here at Burden I take what I've learned and give back to the community."

Kathy Kramer works for the LSU AgCenter. She says, "Working with the kids is fun; Learning Tree is a great program." Director of Development, Gigi Gauthier, also takes time out to be a docent.

"There is no educational requirement to be a docent," Jim cautioned, "just an interest in helping students to understand environmental issues and introducing them to the wonderful world of Trees and Trails at Burden."

Located in the center of Baton Rouge, Jim says the 400 acres of the Burden Center is the "Central Park" of Baton Rouge with something for everyone.

Students spend about three hours 'in the woods' at each session to increase their understanding of nature. The three stations are: *Tree Factory*, *Invasive Species*, and *Life on the Edge*.

Jim Barry is leader of *Invasive Species*, a fascinating study of native vs. invasive. He tells a group of 8 – 12 students there are over 700 invasive plants, insects, and animals in Louisiana. Over half of these can be found in EBR parish.



Above: Fourth graders from St. James Episcopal School

As leader, Jim divides the students into teams, asking them to work together in identification of one of thirty photographs --- is it native or invasive? He cautions, "Invasive is not natural to the area."

"Fourth graders blow my mind away," Jim exclaimed, "They are eager to learn and competitive as team members." For many kids this is, unfortunately, their first exposure to expansive woods with so many species of plants in our 'Urban Forest.'

Jim concluded, "We all need to promote Burden. Since moving to Baton Rouge I am amazed at how many people I have met that have never seen it. On personal tours they are 'in awe' when they see it, no matter the season."



Jim Barry leading Invasive Species Activity

****Volunteers Wanted****

Want to join a great group?

Mail the form (on right) to 4560 Essen Lane (70809) or use the entry form on the 'Join Us' page of BHS Website (www.BurdenHorticultureSociety.com) or call or e-mail our new volunteer coordinator, Simone Kramer (225-235-8896, SKramer@agcenter.lsu.edu). We'd love to hear from you.

Support the Burden Horticulture Society

Donor Name Daytime phone

Donor Address, City, State, Zip

E-mail Address (optional)

Enclosed is my tax deductible donation for LSU Foundation/BHS in the amount of:

- checkbox \$35 checkbox \$50 checkbox \$100 checkbox \$250 checkbox \$500 checkbox \$1000 checkbox Other \$_____

Enclosed is my check made payable to LSU Foundation/BHS

Please charge my checkbox Visa checkbox Mastercard checkbox AmEx checkbox Discover

Card # _____ Exp Date _____

Signature _____

Donations may also be made online at https://www.lsufoundation.org/contribute.php

Gift Designation: Donation for: LSU AgCenter (line 1) and BHS (line 2)

Burden Horticulture Society

Burden Horticulture Society (BHS) is a non-profit organization formed to promote, support, and expand the use of the Burden Center. The LSU Foundation accepts contributions directly in support of the LSU AgCenter's Burden Center activities and programs, together with the Burden Horticulture Society. Your contribution will be accepted by the LSU Foundation as a restricted gift for the benefit of the Burden Horticulture Society.

Partnering with other gardening and outdoor organizations, plus the Rural Life Museum, BHS strives to offer informative opportunities for the public and to increase awareness of this local resource. Your gift will allow us to develop a Master Plan for Burden Center and will help sponsor special educational events.

Please mail to: Burden Horticulture Society
4560 Essen Lane
Baton Rouge, La. 70809

Volunteers Opportunities:

- checkbox Gardening checkbox Publicity
checkbox Clerical checkbox Speakers
checkbox Annual Events checkbox Volunteer Coordination
checkbox Reflections in the Garden checkbox Membership
checkbox Database checkbox Fundraising
checkbox Clerical checkbox Trees and Trails, Maintenance and Development
checkbox Wine and Roses Committee checkbox Trees and Trails, Docents
checkbox Other: _____

Your Name and phone number: _____

Burden Center
4560 Essen Lane
Baton Rouge, LA 70809



What's Happening with Our Friends:

BR Green:

3rd Annual Green Paradise Party

Friday, August 19

Live Oak Arabians

6300 Jefferson Highway

Tickets are \$100

www.batonrougegreen.com or

call 225 381-0037

Hilltop Arboretum:

PlantFest! Teaser

Saturday, August 27, 9am – 12 noon

PlantFest! 2011

Saturday, October 1 & Sunday, October 2

11855 Highland Road

<http://hilltop.lsu.edu/hilltop> or

call 225 767-6916

BHS Annual Events 2011

September 24-25	Fun Family Weekend: Corn Maze Pumpkin Patch
September 29	Hayride Tour of Burden 10:30 AM to Noon
September & October	Corn Maze (TBA)
October 26	Wine and Roses Dinner 6:30 PM
November 6	Burden Center Music Series: The John Dupaquier Trio
November 17	Hayride Tour of Burden 10:30 AM to Noon
November 30	Brush with Burden entry deadline.