

# An Day In The Life of a Director



Chatham  
County  
Mosquito  
Control

Henry  
Lewandowski

# Introduction

## Ideally:

- ✓ Director has minimal involvement in routine operations
- ✓ Developed programs are pushed to the lowest level possible

## Management is then free to:

- ✓ Work externally
- ✓ Analyze the organization

# 1. External Liaison - News Media

FIRST IN GENERAL EXCELLENCE

## Savannah Morning News.

Sunday, June 20, 2004 • 155th Year, Issue 156 • www.savannahnow.com • \$1.25

### DOWNTOWN BROWN

By Bret Bell

912.652.0456 • bret.bell@savannahnow.com

**T**he city's majestic live oaks, whose moss-draped visage is one of the very symbols of Savannah, are under attack from tiny insects that are turning green leaves brown throughout the Historic District.

City foresters started to notice the Kermes scale outbreak about four weeks ago, and conditions have steadily deteriorated into the worst

infestation anyone can remember.

Many of the shade trees on Oglethorpe Avenue and Bay Street are now tinged with tan, as are pockets of trees throughout downtown.

While most of the leaf die-off has been limited to upper branch tips, Kermes scales – tiny insects that spend their entire life on the live oak – have feasted on huge swaths of some canopies, giving the trees a diseased look.

Such outbreaks rarely kill mature live oaks, though they do stunt tree

see **BROWN**, page 7A

#### INSIDE

A graphic explains the life cycle of Kermes scales. **Page 7A**

Scott Bryant/Savannah Morning News photo

The cause is something of a mystery, but officials have several theories.

The leading one: Heavy aerial mosquito spraying last year, prompted by the West Nile virus threat.

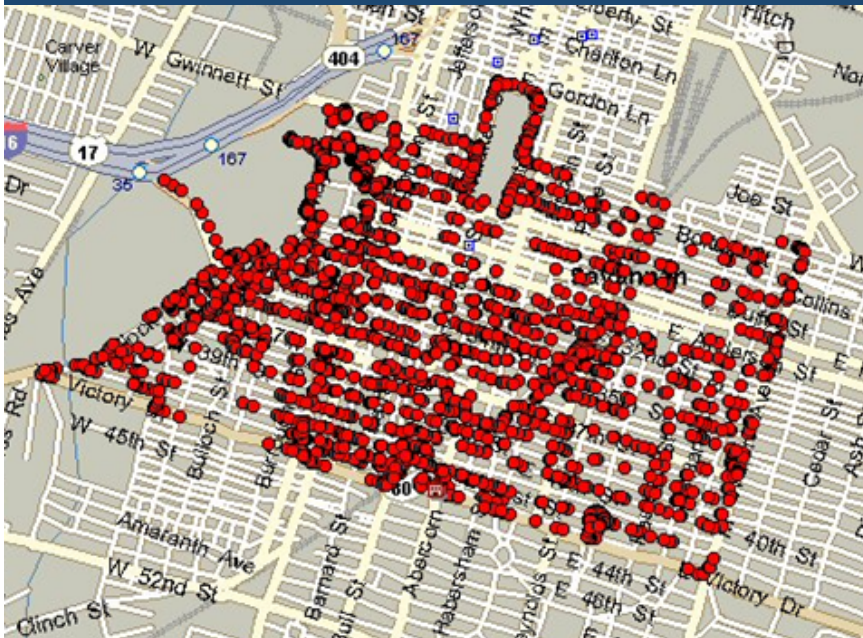


"To residents, I think trees create the character of Savannah .... If you took away our squares and trees, we would be like too much of everywhere else in the country."

# 1. External Liaison - EPA Report

## Targeting

Ground



Aerial



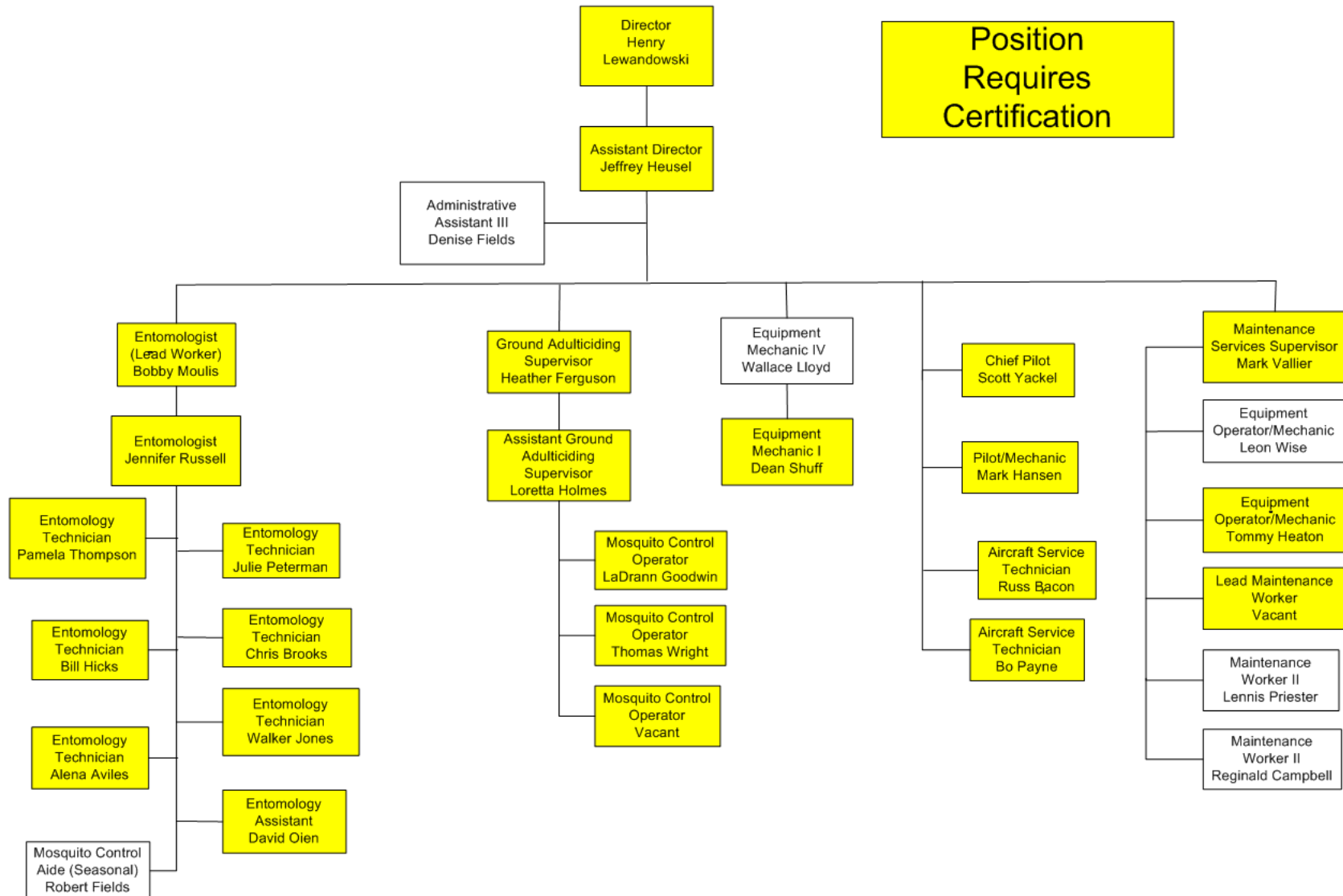
# 1. External Liaison - Citizen Concerns

**EPA Report**



# 1. External Liaison - Citizen Concerns

## Chatham County Mosquito Control Organization Chart September 2008



# 1. External Liaison - Citizen Concerns

## Ground Control Protocols



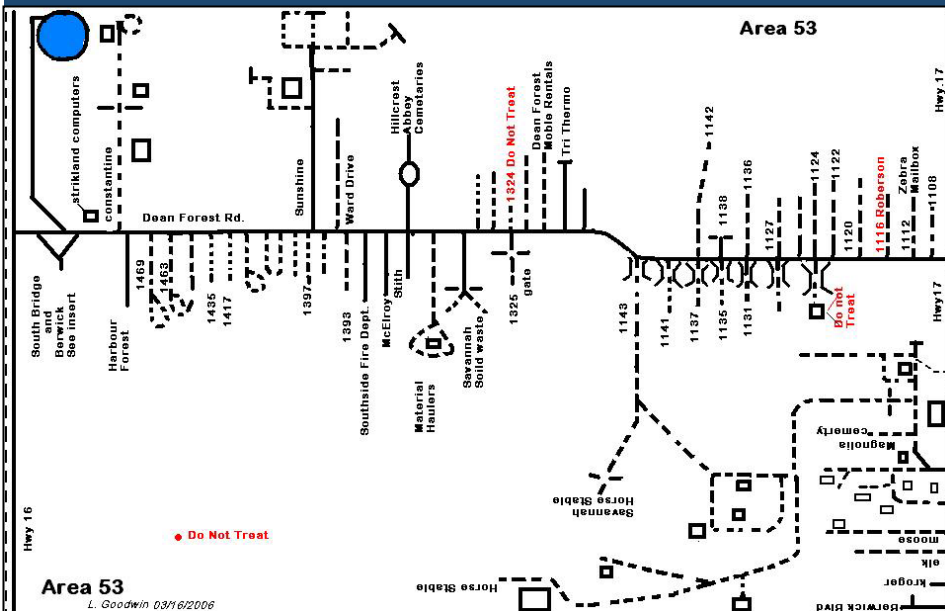
**AREA 53  
SPECIAL INSTRUCTIONS**

**Do not treat:**

- Within 100 feet of fish bearing areas
- 1324 Dean Forest Road. (L.M. 6/85)

**Be sure to treat:**

- 1116 Dean Forest Road (J. Constantine)
- 5608 Silk Hope Road so they can give you directions to their house.
- City of Savannah Horse Stable located on Dean Forest Road at sharp curve. (Key)
- 1131 Dean forest Road (It is ok to drive in the yard.)



**RESTRICTED USE CLASSIFICATION**  
Due to Acute Fish Toxicity  
For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicators Certification.

**SCOURGE® INSECTICIDE**  
with RESMETHRIN/PIPERONYL BUTOXIDE 4% + 12% MF FORMULA II

*Specimen Label*

ACCIDENT INVESTIGATION REPORT

Page 1 of 3

**PURPOSE:** To Prevent Reoccurrence

This report involves: (select one "x")

\_\_\_\_\_ Personal Injury \_\_\_\_\_ Vehicle Accident

**Damage occurred to:** (select one "x")

\_\_\_\_\_ County equipment \_\_\_\_\_ County property \_\_\_\_\_ Other

**Employee name:** \_\_\_\_\_

**Department / Section:** \_\_\_\_\_ **Vehicle #:** \_\_\_\_\_

**Date of Accident / Injury:** \_\_\_\_\_ **Report date:** \_\_\_\_\_

**Day of week occurred:** \_\_\_\_\_ **Time of accident:** \_\_\_\_\_

**Location of incident:** \_\_\_\_\_

# 1. External Liaison - Citizen Concerns

## Records

**Helo Aerial Missions**

Date _____		Wind Direction _____	Speed _____
<input type="checkbox"/> N102CQ	<input type="checkbox"/> N241JH	Malathion <input type="checkbox"/>	Altosand <input type="checkbox"/>
E. Scott Yackel 25111246		Trumpet <input type="checkbox"/>	Golden Bear <input type="checkbox"/>
Hobbs Stop _____		Aqua-Res lin <input type="checkbox"/>	XR-G <input type="checkbox"/>
Hobbs Start _____		Other: _____	
		Amount Used _____	

Responsible Agency: CCMCC Police Ft Pulaski DOT USFW  
Other: \_\_\_\_\_

Tasks Accomplished: Inspection Photos Larviciding Adulticiding  
Other: \_\_\_\_\_


Air Crew	Flight Time	SDB <input type="checkbox"/>
_____	_____	County Mngr <input type="checkbox"/>
_____	_____	DOT <input type="checkbox"/>

ULV SUPERVISOR'S REPORT

Date: August 26, 2004

Supervisor: Heather Ferguson

Biomist 4 +4 = 1.98 oz./acre Scourge = 1.98 oz./acre

Unit #	Driver	Area	Time In	Time Out	Biomist	Scourge	Completed	Comments
2302	Heather Ferguson	38	1900		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2303	Loretta Holmes	42	1800		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2306	Richard Garcia	49	1800		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2301	Thomas Wright	36	1900		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	704 River Road was not treated because of soft sand. Also Huckleberry was not treated because police had area blocked off.
Off	Ladrann Goodwin				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Out on sick leave.
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Areas Deleted: 37

Specials:  
Commons, Saint Andrews On the Marsh, (Wilmington Island) and Brannen Drive

Equipment Failures:

Vehicle #	Description
2303	A/C work only on high setting.

Remarks:  
Ladrann Goodwin out on family sick leave.



# 1. External Liaison - Citizen Concerns



## Georgia Department of Agriculture

Capitol Square • Atlanta, Georgia 30334-4201

Tommy Irvin  
Commissioner

July 19, 2005

Ms. Stacey Kronquest  
6 Egrets Nest Drive  
Savannah, GA 31406

Dear Ms. Kronquest:

This letter is a follow up to your complaint regarding a mosquito control application made by Chatham County Mosquito Control.

Our field agent, Mr. Brad Baker, documented all the information relevant to this matter. He confirmed the application of Scourge as a mosquito adulticide to the Wylly Island area by Mr. Richard Garcia of the Chatham County Mosquito Control. Scrouge is a registered pesticide and is approved for use in mosquito control. No evidence of pesticide misuse was documented with respect to the application in question. In addition, effective April 26, 2005, Chatham County discontinued spraying causeways with ground ULV equipment. A causeway being defined as a bridge or roadway that has marsh or water on both sides. This policy states ground ULV units will not disperse pesticides while traveling on any causeway in Chatham County.

approved for use in mosquito control. No evidence of pesticide misuse was documented with respect to the application in question. In addition, effective April 26, 2005, Chatham County

If you have any questions, please feel free to contact us.

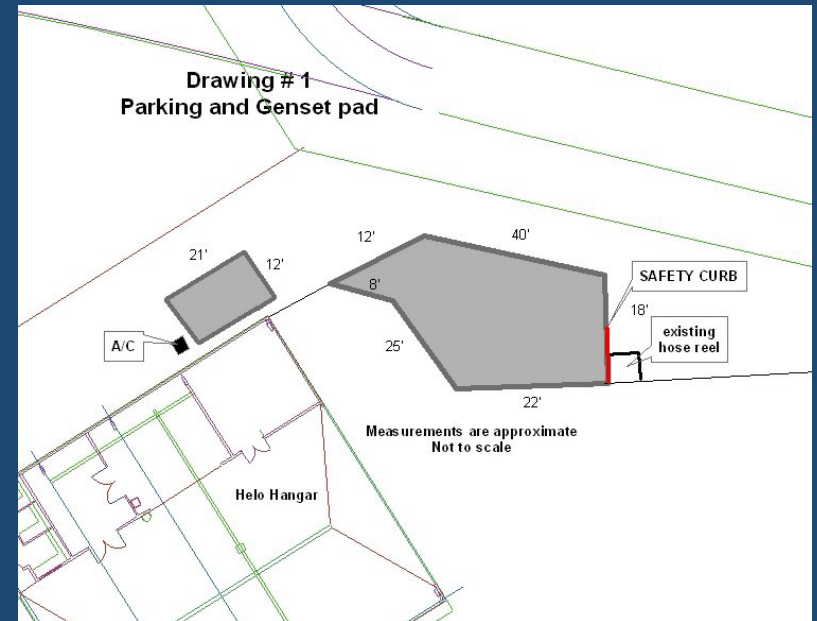
Sincerely,

Tommy Gray  
Ag Division Director  
Pesticide Section

Cc: Mr. Brad Baker  
Mr. Henry Lewandowski

EQUAL OPPORTUNITY EMPLOYER

# 1. External Liaison - Board of Commissioners



# 1. External Liaison - Health Department



**COASTAL HEALTH DISTRICT**  
*"protecting and advancing the public's health"*

24 Oglethorpe Professional Blvd. (31406) [www.gachd.org](http://www.gachd.org)  
P.O. Box 15879 Phone: 912-644-5217  
Savannah, GA 31416 Fax: 912-644-5230

W. Douglas Skelton, MD District Health Director

**NEWS RELEASE**  
August 24, 2007

Contact: Ginger Heidel  
Director of Public Relations  
912.644.5217

**Third Location Tests Positive for West Nile Virus Activity in Mosquitoes**  
*All Chatham County Residents Encouraged to Prevent Mosquito Bites*

**CHATHAM CO., GA**— A pool of mosquitoes collected from a third Chatham County location have tested positive for infection with West Nile Virus, underscoring the need for

Chatham County Mosquito Control will continue spraying mosquitoes throughout the county, and residents can expect to see the agency's bright yellow, low-flying aircraft in the skies frequently.



West Nile Virus is a potentially serious illness usually spread by the bite of an infected mosquito. Many people who become infected will have no symptoms, but severe cases can include high fever, headache, neck stiffness, disorientation, coma, and paralysis. No humans or animals have tested positive for West Nile Virus in Chatham County this year. There have been 6 human cases in Georgia. Nationwide, there have been 576 human cases this year, with 19 deaths.

Chatham County Mosquito Control will continue spraying mosquitoes throughout the county, and residents can expect to see the agency's bright yellow, low-flying aircraft in the skies frequently.

The Health Department recommends everyone follow the 5 D's of prevention against mosquito bites:

- **Dusk** – Mosquitoes carrying West Nile Virus usually bite at dusk and dawn (see below)-
- **Dawn** – Avoid outdoor activity at dusk and dawn if possible. If you must be outside, be sure to protect yourself from bites.
- **Dress** – Wear long-sleeved shirts and pants to reduce the amount of exposed skin.
- **DEET** – Cover exposed skin with a repellent containing the chemical DEET, which is the most effective against mosquito bites.
- **Drain** – Empty any containers holding standing water, because they can be excellent breeding grounds for virus-carrying mosquitoes.

###

Georgia Department of Human Resources • Division of Public Health

Bryan County Camden County Chatham County Effingham County Glynn County Liberty County Long County McIntosh County

## 2. Develop Staff

- ✓ Listen
- ✓ Discuss plans, results, problems
- ✓ Small errors are great learning tools
- ✓ Learn to let go - TQM principals

## 2. Develop Staff

- ✓ Bring a solution, not a problem
- ✓ Work to eliminate fear
- ✓ Staff should ask questions
  - Ditching program



## 2. Develop Staff

- ✓ Training programs are a reward
- ✓ Encourage participation in meetings and symposiums
- ✓ Professional meetings stimulate personal growth

# 3. Develop and Control the Budget

- ✓ Provide tools to get the job done
- ✓ Spend According to the plan

2008 Priority →

Delete →

Budget Meeting August 13, 2008  
FY 2008-2009 End of Year Priority Spending

#	Items	Amount	Cumulative
1	Scourge Adulicide	\$98,065	\$98,065
2	LCD Projector for Conference Room	\$1,700	\$103,365
3	Computer for Conference Room	\$2,500	\$115,065
4	Misc Projects	\$4,000	\$112,565
5	XRG Larvicide	\$22,804	\$137,869
6	Facilities Maintenance Software	\$2,500	\$101,665
7	Replace Hallway/ULV carpet area	\$5,200	\$108,565
8	Truck Mounted ULV Spray System	\$28,000	\$165,869
9	DODD Training	\$5,420	\$171,289
10	Shop Mechanic Training	\$2,170	\$173,459
11	Semi Rental	\$1,275	\$174,734
12	County Vehicle Maint Parts/Labor-Fleet	\$2,000	\$176,734
13	GMCA Training	\$2,000	\$178,734
14	Sentinel Chicken Testing	\$10,000	\$188,734
15	Benchmark Trip to Florida	\$1,195	\$189,929
16	MAMCA Planning	\$500	\$190,429
17	Fast Battery Charger	\$1,100	\$99,165
18	Breakroom Cabinets (expended FY 2007/2008)	\$5,500	\$195,929
19	Paint Stain Coop	\$2,500	\$198,429
20	Illuminate Flag Pole	\$4,500	\$202,929
21	Relocate Admin Generator	\$40,000	\$242,929
<b>Expenditures</b>			
	Beginning Deficit		\$158,000
	Unleaded		\$15,000
	Diesel		\$10,000
	Jet A		\$30,000
	Avgas		\$2,000
	Trumpet		\$20,000
	<b>Total</b>		<b>\$235,000</b>
	Recuperated funds		\$242,929
	Expenditures		\$235,000
	Surplus		\$7,929

← Shortfall Balance

← Shortfall

## 4. Set the Performance Standard

### a. Hire

- ✓ Interview Teams & Questions, Objective Process

### b. Fix or Fire

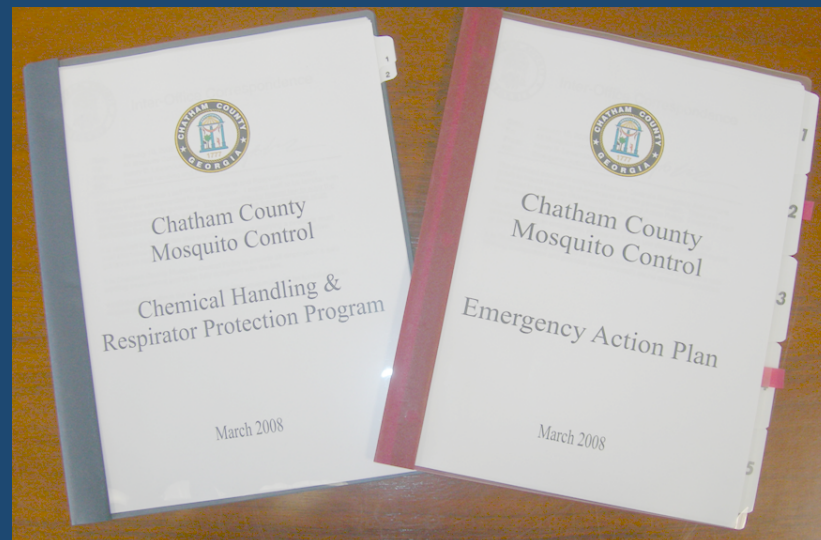
- ✓ Fix or Fire, Consult with Human Resources!



# 4. Set the Performance Standard

c. Become Indispensable to Tax Payers, Elected Officials, County Manager, w/o growing in size

1. Maintenance/Safety



# 4. Set the Performance Standard

## c. Become Indispensable

### 2. Vehicles/Equipment



## 4. Set the Performance Standard

### c. Become Indispensable

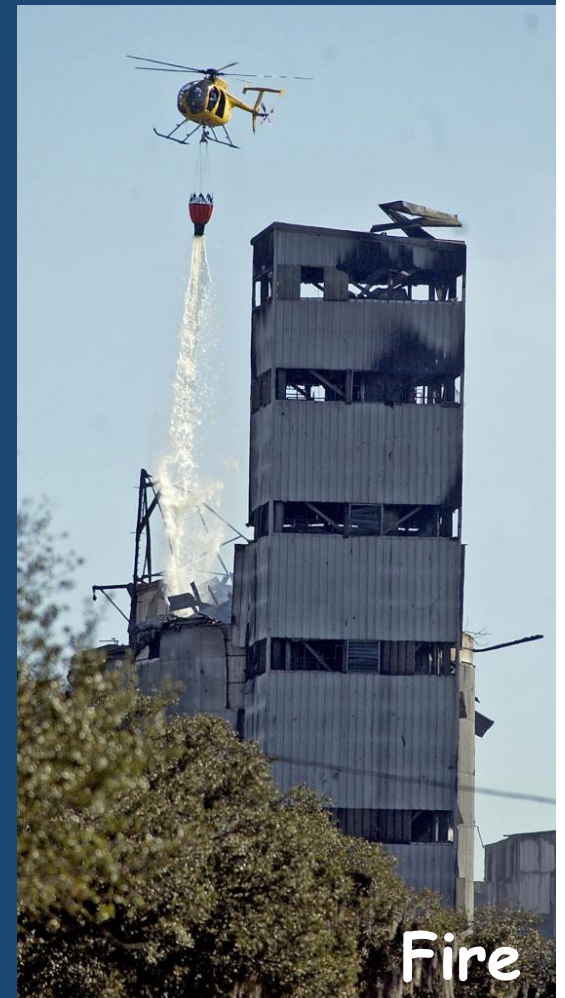
#### 3. ULV/Scooters



# 4. Set the Performance Standard

## c. Become Indispensable

### 4. Aviation Surveillance/Treatment + Police & Fire



# 4. Set the Performance Standard

## c. Become Indispensible

### 5. West Nile Virus adaptations

#### ADAPTATIONS FOR WNV SURVEILLANCE AND CONTROL IN CHATHAM COUNTY

HENRY B. LEWANDOWSKI, JR. AND ROBERT A. MOULIS

Chatham County Mosquito Control, 65 Billy B. Hair Drive, Savannah, GA 31408

##### I. INTRODUCTION

Chatham County is the most northern coastal county in Georgia occupying approximately 438 square miles. The area includes a variety of aquatic and terrestrial habitats, such as coastal barrier islands, urban landscape, and xeric sandhill regions. Thirty-nine species of mosquitoes are known to occur in the county.

West Nile virus activity was first detected in Chatham County in 2001; however, surveillance and control program changes to deal with the developing disease threat began in 1999. As information about West Nile virus epidemiology was acquired, surveillance and control methods were adapted so that the following programs were in place at the start of the 2003 mosquito season. Our sentinel chicken surveillance program, originally intended to detect Eastern Equine Encephalitis virus in limited rural areas of the county, was expanded to monitor West Nile virus activity county-wide especially the urban area of Savannah. Mosquito surveillance was accomplished primarily with gravid traps that were placed at twelve fixed locations around the county. Additional gravid traps were temporarily deployed that year in neighborhoods where infected birds and mosquitoes were collected. In urban Savannah, catch basins were treated with 150 day Altosid® Briquets because these habitats are known or are potential larval developmental areas for *Culex* mosquitoes in other locations of the United States (Covell and Resh 1971, Halzelrigg and Pelsue 1980, Pfunter 1978). Ground and aerial spray operations specifically targeted *Culex quinquefasciatus* Say, but the finding of West Nile virus infected birds

and mosquitoes was the primary indicator used to initiate treatment. In spite of a massive effort by Mosquito Control and District Health Department staff, the outcome in Chatham County seemed disappointing: 27 birds, 67 mosquito pools, 6 sentinel chickens and 1 horse tested positive for West Nile virus. Nine human cases (one fatal) of West Nile fever/encephalitis were reported. For the effort expended, staff members were not satisfied with the West Nile virus control results. A comprehensive review of the West Nile virus surveillance and control program began in September 2003.

##### II. COMPREHENSIVE PROGRAM REVIEW—2003

Every aspect of our West Nile virus surveillance and control program was evaluated. In order to test for pesticide resistance, our review began by contacting Dr. William Brogdon at the Centers for Disease Control and Prevention. *Culex quinquefasciatus* egg rafts were shipped and pesticide resistance tests were conducted on two local populations of this species. Analysis of the two populations showed 64% and 74% less susceptibility to malathion, and 20% and 40% less susceptibility to permethrin when compared with a known insecticide-susceptible population of *Cx. quinquefasciatus*.

Mapping known indicators of West Nile virus activity, including infected birds, mosquitoes, and sentinel chickens that tested positive for the virus proved to be very useful for our program. It showed a concentration of transmission activity in the main urban area of Savannah including the Downtown, Victorian, and historic districts,

## 4. Set the Performance Standard

### d. Protocols & Policies

- ✓ **General Policies**
  - How many is too many
- ✓ **Children, Bicycles & Guns**
- ✓ **Spray Protocol, Need vs. Demand**

## 4. Set the Performance Standard

### e. Don't get complacent

- ✓ Correspondence, Content and Appearance
- ✓ Presentations
- ✓ Don't give residents (our real boss) the runaround

## 5. Lead by Example

- ✓ Be on time
- ✓ Account for your time
- ✓ County vehicle use



## 6. Develop Mission/Operational Goals

**No Disease**  
**Minimal Nuisance**

**Five Year Goals**  
**Routine Operations**

## 7. You are the Community

- Encourage Participation in Public Events



Hurricane Expo



School Career Days

- ✓ Student Internships
- ✓ SCAD Film Documentary

## 8. Most Important Responsibility

**PICK UP THE CHECKS!**



Thank You!

Questions?