# BUREAU OF FORESTRY FOREST HEALTH PROGRAM ANNUAL REPORT, FISCAL YEAR 2008 CHARLES M. BURNHAM, PROGRAM SUPERVISOR

# SUMMARY OF INSECT/ DISEASE ACTIVITY

**AERIAL SURVEY:** The annual aerial survey was conducted as part of our cooperative agreement with the US Forest Service. All areas of concern were recorded electronically on a digital sketchmapping tablet provided by the federal government. A complete summary of the disturbances observed can be found elsewhere in this report.

WINTER MOTH: Continues to be a major defoliator. The most recent areas to be infested are in Topsfield and Ipswich. The University of Massachusetts continues to release the parasitic fly *Cyzenis albicans* in a hope of establishing a biological control for this defoliator. This years release was conducted in the Town of Wellesley.

**FOREST TENT CATERPILLAR:** A noticeable decline in defoliation from the last three growing seasons was observed. There are small pockets of mortality starting to show up in maple and oak stands throughout Berkshire County. The decline in defoliation from this insect can be attributed to the presence of the "Friendly Fly" *Sarcophaga aldrichi* and infections for the *Entomophaga* fungus.

**HEMLOCK WOOLLY ADELGID:** One new community (Townsend) was added to the list of communities know to have infestations. Noticeable decline in tree health was noted in Chester Gardner State Park at Sanderson Brook. In cooperation with the US Forest Service we continue to release the predator *Laricobius nigrinus*. Follow-up surveys have been unable to recover any of these beetles.

VIBURNAM LEAF BEETLE: Though not considered a forest pest this insect is completely defoliating understory viburnum. First documented in 2007 (in Berkshire County) this insect has spread rapidly throughout the state and will soon be an issue on certain species of viburnum.

MISCELLANEOUS

EASTERN TENT CATERPILLAR: Remains at a low level statewide.

GYPSY MOTH: Light defoliation was observed in southeaster Massachusetts and on the Cape.

FALL WEBWORM: This insect has not been observed in any quantity statewide.

ELONGATE HEMLOCK SCALE: Populations continue to increase in infested stands. Some severe defoliation is associated with this pest. Although not causing complete

mortality to the hemlocks this scale is causing additional stress on already weakened trees.

BEECH BARK/NECTRIA: This complex continues to spread throughout Berkshire County. Large areas of scattered mortality related to this complex are becoming more evident.

#### SPECIAL PROJECTS

SIREX WOODWASP TRAPPING: We continue to deploy traps for this insect west of the Connecticut River. This year 48 traps were deployed as part of our cooperative agreement with the USDA APHIS and US Forest Service. No sirex woodwasps were collected.

SUDDEN OAK DEATH SURVEY: We continue to monitor for this pathogen using the stream baiting technique using rhododendron leaves. Three locations were selected in central and eastern Mass that is in close proximity to where possible infected plants from California were shipped. Traps were checked five times during the growing season and samples were sent to an approved lab for diagnosis.

APHIS ASSISTANCE: Weekly cutting of striped maple and white ash for the USDA Otis lab continued. In addition one week was spent assisting in Detroit with chain saw safety training and the collection of samples for diagnostic work.

LOG LOADER ASSISTANCE from the northeast region was provided to Massasoit State Park to remove logs that were cut as part of the hazard tree removal program. Additionally the log loader and several crews assisted the Town of Barnstable following a severe wind storm on November 4.

#### PERSONNEL

Danielle Johnson was hired to fill the vacant position in the Southeast Region.

# STATISTICAL SUMMARY OF ACTIVITIES

# District Supervisor

Training Workshops Attended	3
Training Workshops Conducted	3
Number of Attendees	300
Municipal Contacts	93
Landowner Assistance	46
Requests for Information Answered	200
Assistance to other Agencies	1
Time Required	2 Man Days
Media Interviews	1

#### Tree Crew Activities

Poison Ivy Control and Hemlock Woolly Adelgid

Control	2	Man Days
Assistance to Other State Agencies	96	Man Days
Assistance to Other DEM Programs	11	Man Days
Recreation Areas Assisted with Tree Wor	k 16	
Number of Trees Removed	992	
Number of Trees Pruned	120	
Stumps Ground	20	

### AERIAL SURVEY RESULTS

Fall Cankerworm	84 Acres
Gypsy Moth	15,324 Acres
Forest Tent Caterpillar	1,429 Acres
Locust Leaf Miner	76 Acres
Winter Moth	27,875 Acres
Periodical Cicada	8,551 Acres
Hemlock Wooly Adelgid	119 Acres
Red Pine Scale	61 Acres
Armillaria Root Disease	15 Acres
Beech Bark/Nectria	68 Acres
Ash Decline	79 Acres
Diplodia Blight	1,131 Acres
Fire	729 Acres
Improper Planting	10 Acres
Land Use Conversion	110 Acres
Suppression	149 Acres
Unknown	2,190 Acres

Year	DCA	Name	Damage	Acres
2008	12014	Fall Cankerworm	Discoloration	30.797
2008	12014	Fall Cankerworm	Mortality	53.045
			Total	83.842
2008	12089	Gypsy Moth	Discoloration	83.243
2008	12089	Gypsy Moth	Mortality	15240.35
	•		Total	15323.6
2008	12096	Forest Tent	Discoloration	127.396
2008	12096	Forest Tent	Mortality	1301.793
	·		Total	1429.189
2008	12119	Locust Leafminer	Mortality	76.118
			Total	76.118
2008		Winter Moth	Defoliation	6073.599
2008		Winter Moth	Discoloration	1418.152
2008	12197	Winter Moth	Mortality	20383.36
			Total	27875.12
2008	13012	Periodical Cicada	Defoliation	8551.805
			Total	8551.805
2008		Hemlock Woolly Adelgid	Discoloration	20.819
2008	14004	Hemlock Woolly Adelgid	Mortality	97.695
			Total	118.514
2008	14033	Red Pine Scale	Discoloration	61.01
			Total	61.01
2008	21001	Armillaria Root Disease	Mortality	15.393
			Total	15.393
2008		Beech Bark Disease	Discoloration	78.485
2008	22042	Beech Bark Disease	Mortality	89.045
		Λ . I. F	Total	167.53
2008	24004	Ash Decline	Mortality	79.35
2000	$\Delta E \Delta E \Delta$		Total	79.35
2008		Diplodia Blight	Defoliation	169.073
2008		Diplodia Blight	Discoloration	113.817
2008	2000	Diplodia Blight	Mortality	848.347
2008	3000	Ciro	Total	1131.237
2000	3000		Mortality	541.104
2008	3001	Wild Fire	Total Mortality	541.104
2000	3000	VVIICI II C	Total	39.666
2008	50004	Flooding/High Water	Defoliation	48.288
2008		Flooding/High Water	Discoloration	30.252
2008		Flooding/High Water	Dieback	25.4
2008		Flooding/High Water	Mortality	1169.23
			Total	1273.17
2008	7000	Human Activities	Mortality	822.574
			Total	822.574
2008	90000	Unknown	Defoliation	2240.227
			Total	2240.227

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