Central Mass. Mosquito Control Project:

Incorporating A GIS- Year 1

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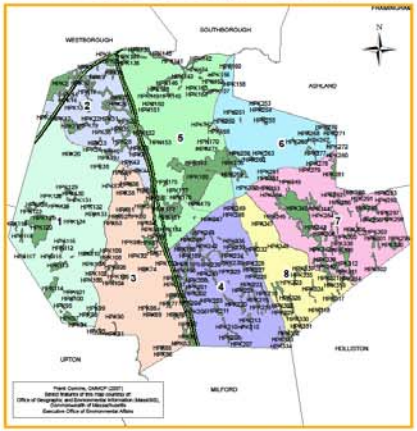
Mosquito Breeding Wetlands



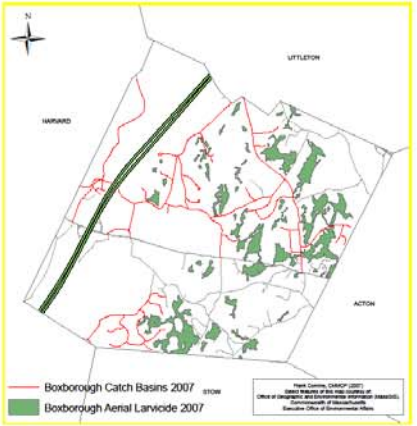
This map is of Hopkinton and includes wetlands that typically breed mosquitoes as well as a layer of map sections for the town. The wetland layer can be used as a guide for mosquito sources, with the map sections used as a point of reference for field technicians. The map sections layer can also be used in conjunction with other programs at CMMCP. Pictures can be linked to the specific wetlands as well as treatment data.

In order to provide better service to its towns and create a more efficient MCP overall, CMMCP created a Geographic Information System (GIS) department in the fall of 2006. Since then, CMMCP personnel have been working to incorporate many of the programs and services that it provides. Here are some examples of what CMMCP has been able to accomplish over this past year.

Future plans for GIS at CMMCP include GPS linked ULV machines, field technician data offloads, as well as further data integration and inter-department connectivity. In time CMMCP will be able to plan and coordinate control efforts more effectively, having data from all departments accessible in the GIS.

Larvicide Program Photos by Timothy Deschamps

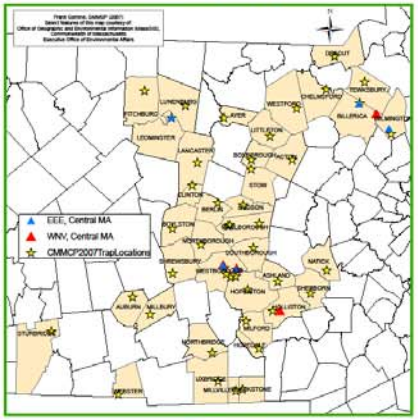
Larvicide Program



Here is a map of Boxborough with the various larvicide programs of CMMCP displayed. The aerial larvicide program, ground larvicide program and catch basin larvicide program are all depicted here for the town in 2007. Data from these programs can be linked to the treatment sites.

ID*	CardNumber	Street	Description	Comments	DatePrepared	DateChecked	FieldTechnician	DipNeeds(dip)	1st_Instars	2nd	3rd	4th	Pupae	ProductUsed
2	68	Chamberlain	behind pole #1 swamp		6/4/2002	6/4/2002	T.M.	0	N	N	N	N	N	N/A
3	68	Chamberlain	behind pole #1 swamp		<Null>	5/11/2002	T.M.	0	N	N	N	N	N	N/A
4	68	Chamberlain	behind pole #1 swamp		<Null>	5/23/2003	T.M.	5	N	Y	N	N	N	Vectobac-G
5	68	Chamberlain	behind pole #1 swamp		<Null>	10/3/2002	T.M.	3	N	N	Y	Y	N	Vectobac-G
6	68	Chamberlain	behind pole #1 swamp		<Null>	6/3/2004	J.K.	0	N	N	N	N	N	N/A

Mosquito Surveillance Sites w/ Past Virus Data



Here is a map of the CMMCP service area with the mosquito surveillance traps sites along with past virus activity in the surrounding area. These trap sites have several pictures linked to them as well as links to entered collection data in the MDPH database. This surveillance data can be useful in finding out where certain species are prevalent or in observing the trends of mosquito populations.

ID*	Pool ID*	Trap Set Date	Collection Date	Tested Date	Trap Type	Number of Traps *	Trap Site	Pool Size
15	CM06-00012	5/31/2006	6/1/2006	6/6/2006	Combination Trap - 25dec C	2	Concord Rd., Woodlawn Cemetery,	1
122	CM06-00121	6/21/2006	6/22/2006	6/26/2006	Combination Trap - 25dec C	2	Concord Rd., Woodlawn Cemetery,	4
214	CM06-00213	6/28/2006	6/29/2006	7/3/2006	Combination Trap - 25dec C	2	Concord Rd., Woodlawn Cemetery,	3
228	CM06-00227	7/5/2006	7/6/2006	7/10/2006	Combination Trap - 25dec C	2	Concord Rd., Woodlawn Cemetery,	1
317	CM06-00316	7/12/2006	7/13/2006	7/18/2006	Combination Trap - 25dec C	2	Concord Rd., Woodlawn Cemetery,	8
318	CM06-00317	7/12/2006	7/13/2006	7/18/2006	Combination Trap - 25dec C	2	Concord Rd., Woodlawn Cemetery,	16
412	CM06-00411	7/19/2006	7/20/2006	7/25/2006	Combination Trap - 25dec C	2	Concord Rd., Woodlawn Cemetery,	4
496	CM06-00495	7/26/2006	7/27/2006	8/1/2006	Combination Trap - 25dec C	2	Concord Rd., Woodlawn Cemetery,	3
567	CM06-00566	8/2/2006	8/3/2006	8/8/2006	Combination Trap - 25dec C	2	Concord Rd., Woodlawn Cemetery,	1
640	CM06-00639	8/9/2006	8/10/2006	8/15/2006	Combination Trap - 25dec C	2	Concord Rd., Woodlawn Cemetery,	3
722	CM06-00721	8/16/2006	8/17/2006	8/22/2006	Combination Trap - 50dec C	2	Concord Rd., Woodlawn Cemetery,	2
796	CM06-00797	8/23/2006	8/24/2006	8/29/2006	Combination Trap - 25dec C	2	Concord Rd., Woodlawn Cemetery,	6
795	CM06-00798	8/23/2006	8/24/2006	8/29/2006	Combination Trap - 25dec C	2	Concord Rd., Woodlawn Cemetery,	1
867	CM06-00866	8/30/2006	8/31/2006	9/7/2006	Combination Trap - 25dec C	2	Concord Rd., Woodlawn Cemetery,	1
868	CM06-00867	8/30/2006	8/31/2006	9/7/2006	Combination Trap - 25dec C	2	Concord Rd., Woodlawn Cemetery,	12

Data obtained from MDPH Arbovirus Database

Water Management Jobs

This map shows one of the past water management jobs of CMMCP. On top of the orthophoto is the job site in red and nearby wetlands in green. Data specific to the particular job can be linked to the job site as well as pre and post pictures. Future maintenance data can eventually be added.

ID*	JobNumber	Owner	Address	Town	WorkStarted	LastWorked
1		999 Smith, J.	Mass Ave	Lunenburg	7/1/97	7/1/97

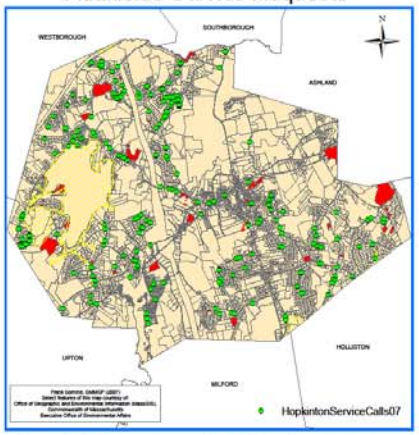
Pre Management Photo

Post Management Photo

Water Management Photos by Amanda Hope

CMMCP would like to thank the Norfolk County MCP for their help with the the startup of the CMMCP GIS. Their experience and ideas assisted greatly with the foundation of this department.

Adulticide Service Requests



This map is of Hopkinton and portrays the adulticide service requests for the town in 2007. Also on this map is parcel data for the town with exclusion areas highlighted in red as well as school locations and NHESP priority habtat. With similar maps CMMCP can determine what sections of town have the highest number of requests and consider additional control methods in these areas to reduce adult emergence.

AND_Street	AND_Zone	Town	Call_Date	Resident	Address	Phone
Indian Brook Condo's	Hopkinton	Hopkinton	5/8/2007	Damon Mgt.	Indian Brook Condo's	617-731-9222
1 Honeysuckle Cir.	Hopkinton	Hopkinton	5/14/2007	Gibbs	1 Honeysuckle Cir.	508-435-1349
56 Rocky Woods Rd.	Hopkinton	Hopkinton	5/15/2007	Nock	56 Rocky Woods Rd.	
15 Valleywood Rd.	Hopkinton	Hopkinton	5/18/2007	Whelan	15 Valleywood Rd.	
22 West Elm St.	Hopkinton	Hopkinton	5/18/2007	Cotone	22 West Elm St.	
73 Front St.	Hopkinton	Hopkinton	5/18/2007	Lynch	73 Front St.	
45 Chamberlain St.	Hopkinton	Hopkinton	5/17/2007	Segura	45 Chamberlain St.	
2 Valentine Cir.	Hopkinton	Hopkinton	5/17/2007	Morrissey	2 Valentine Cir.	
7 Hopkins Rd.	Hopkinton	Hopkinton	5/21/2007	Abele	7 Hopkins Rd.	
71 South Mill St.	Hopkinton	Hopkinton	5/21/2007	Molly	71 South Mill St.	
6 Hopkins Rd.	Hopkinton	Hopkinton	5/23/2007	Moschetta	6 Hopkins Rd.	
6 Hopkins Rd.	Hopkinton	Hopkinton	5/23/2007	Doucette	6 Hopkins Rd.	
92 Wood St.	Hopkinton	Hopkinton	5/23/2007	Hearns	92 Wood St.	