

SITE ID	WORK DATE	WORK AMOUNT	WORK TYPE	ERIAL AMQ	MATERIAL	BRAND
109G	5/10/1994		CHECKED			
109G	5/10/1994		CHECKED	6	BTI (LBS)	
109G	3/29/1994	40	CLEANED			
109G	7/18/1994		CHECKED			
109G	9/15/1994		CHECKED	23	BTI (LBS)	
109G	11/30/1994	50	CLEANED			
109G	11/30/1994		SNAKED			
109G	1/9/1995	345	BRUSHED			
109G	1/9/1995	425	BRUSHED			
109G	1/17/1995	575	BRUSHED			
109G	1/17/1995	250	BRUSHED			
109G	4/6/1995		CHECKED			
109G	8/29/1995		CHECKED			
109G	11/20/1995	30	CLEANED			
109G	11/20/1995		SNAKED			
109G	11/27/1995	365	RE-CUT & CLEANED			
109G	4/11/1996		SNAKED			
109G	4/11/1996	50	CLEANED			
109G	3/8/1996		CUT DEADWOOD			
109G	3/8/1996	25	CLEANED			
109G	3/8/1996		SNAKED			
109G	3/11/1996		CUT DEADWOOD			
109G	3/28/1996	50	CLEANED			
109G	3/28/1996		SNAKED			
109G	3/28/1996		CUT DEADWOOD			
109G	4/8/1996		SNAKED			
109G	4/25/1996		SNAKED			
109G	4/26/1996		CHECKED	43	BTI (LBS)	BACTIMO S PELLETT

109G	4/26/1996
109G	5/31/1996
109G	5/31/1996
109G	7/12/1996
109G	8/5/1996
109G	8/27/1996
109G	8/27/1996
109G	9/18/1996
109G	9/27/1996
109G	10/22/1996
109G	10/30/1996
109G	11/20/1996
109G	11/20/1996
109G	12/3/1996
109G	12/3/1996
109G	2/14/1997
109G	4/4/1997
109G	4/22/1997
109G	4/22/1997

CHECKED	3 BTI (LBS)	BACTIMOS PELLETS
CHECKED	25 BTI (LBS)	BACTIMOS GRANULAR
CHECKED		
CHECKED	16 BTI (LBS)	BACTIMOS GRANULAR
CHECKED	30 BTI (LBS)	BACTIMOS GRANULAR
CHECKED		
SNAKED		
CUT DEADWOOD		
SNAKED		
CLEANED	900	
SNAKED		
SNAKED		
SNAKED		
CHECKED	30 BTI (LBS)	BACTIMOS GRANULAR
CHECKED	3 BTI (LBS)	BACTIMOS GRANULAR

109G	4/22/1997		CHECKED	8 BTI (LBS)	BACTIMOS GRANNULAR
109G	6/3/1997		SNAKED		
109G	6/3/1997		CHECKED	2 BTI (LBS)	BACTIMOS GRANNULAR
109G	9/5/1997		CHECKED	0.5 GBO (GAL)	GB-1111
109G	9/5/1997		SNAKED		
109G	7/10/1997		CHECKED		
109G	8/15/1997		CHECKED		
109G	11/5/1997	630	CLEANED		
109G	11/5/1997		SNAKED		
109G	11/5/1997	30	CLEANED		
109G	11/5/1997	25	SHOVELED		
109G	11/5/1997		SNAKED		
109G	11/18/1997		CUT DEADWOOD		
109G	1/23/1998	30	CLEANED		
109G	2/17/1998		SNAKED		
109G	2/26/1998		SNAKED		
109G	3/18/1998		SNAKED		
109G	4/10/1998		SNAKED		
109G	5/1/1998		CHECKED	0.5 GBO (GAL)	GB-1111 VECTOB ACG
109G	5/1/1998		CHECKED	6 BTI (LBS)	
109G	6/15/1998		SNAKED		
109G	6/15/1998		CHECKED	0.13 GBO (GAL)	NO MATCH
109G	6/15/1998		CHECKED	0.13 GBO (GAL)	58998-27- 2219
109G	10/29/1998	750	CLEANED		
109G	12/18/1998	700	BRUSHED		
109G	2/9/1999		SNAKED		
109G	3/11/1999	30	CLEANED		

109G	3/11/1999		CUT DEADWOOD			
109G	4/27/1999		SNAKED			
109G	5/19/1999		CHECKED	1.5	GB0 (GAL)	GB-1111
109G	6/1/1999		SNAKED			
109G	6/1/1999		CHECKED			
109G	7/9/1999		CHECKED			
109G	9/2/1999		CHECKED	0.13	GB0 (GAL)	GB-1111
109G	2/14/2000	30	CLEANED			
109G	2/14/2000		SNAKED			
109G	4/24/2000		SNAKED			
109G	5/2/2000	240	CLEANED			
109G	5/2/2000		CUT DEADWOOD			
109G	5/2/2000		SNAKED			
109G	7/27/2000	25	CLEANED			
109G	7/27/2000		SNAKED			
109G	11/28/2000	300	CLEANED			
109G	11/28/2000		CUT DEADWOOD			
109G	11/28/2000		SNAKED			
109G	12/13/2000	300	BRUSHED			
109G	12/13/2000		CUT DEADWOOD			
109G	12/15/2000	480	BRUSHED			
109G	12/15/2000		CUT DEADWOOD			
109G	4/13/2001	40	CLEANED			
109G	4/13/2001		SNAKED			
109G	4/13/2001		CHECKED	3	BTI (OZ)	VECTOB AC
109G	9/18/2001		CHECKED			

109G	6/11/2001		CHECKED	1.1	GBO (GAL)	GB-1111
109G	6/12/2001		CHECKED	3	BTI (OZ)	AQUABA C
109G	7/11/2001		SNAKED			
109G	10/30/2001	300	CLEANED			
109G	10/30/2001		SNAKED			
109G	12/18/2001	200	CLEANED			
109G	12/18/2001		SNAKED			
109G	3/4/2002	670	BRUSHED			
109G	3/4/2002	400	CLEANED			
109G	3/5/2002	600	CLEANED			
109G	3/5/2002		SNAKED			
109G	4/1/2002		SNAKED			
109G	5/14/2002		SNAKED			
109G	11/6/2002	30	CLEANED			
109G	11/6/2002		SNAKED			
109G	11/6/2002	20	CLEANED			
109G	12/16/2002	40	CLEANED			
109G	12/16/2002		SNAKED			
109G	1/14/2003	30	CLEANED			
109G	1/14/2003		SNAKED			

COMMENTS
1 PIPE OPENED, CHAIN SAW WORK STAGE 1
3 PIPES OPENED NO BREEDING, DRY
OPENED 2 PIPES
NO BREEDING, QUAKER ROAD MOSTLY DRY AT QUAKER RD. QUAKER ROAD OPENED 1 PIPE, QUAKER ROAD
JOSHUA ROAD OPENED 1 PIPE, QUAKER ROAD QUAKER ROAD CHAINSAW WORK, QUAKER ROAD QUAKER ROAD OPENED 2 PIPES, QUAKER ROAD QUAKER ROAD QUAKER ROAD OPENED 1 PIPE, QUAKER ROAD CHAINSAW WORK, QUAKER ROAD OPENED 1 PIPE, QUAKER ROAD OPENED 1 PIPE, QUAKER ROAD
QUAKER ROAD

QUAKER ROAD

QUAKER ROAD
NO BREEDING,
QUAKER ROAD

QUAKER ROAD

QUAKER ROAD
NO BREEDING,
QUAKER ROAD
OPENED 1 PIPE,
QUAKER ROAD

CHAINSAW
WORK, QUAKER
ROAD

OPENED 1 PIPE,
QUAKER ROAD

QUAKER ROAD

OPENED 1 PIPE,
QUAKER ROAD

OPENED 1 PIPE,
QUAKER ROAD

OPENED 1 PIPE,
QUAKER ROAD

QUAKER ROAD

QUAKER ROAD

QUAKER ROAD
OPENED 1 PIPE,
QUAKER ROAD

QUAKER ROAD

QUAKER ROAD

OPENED 1 PIPE,
QUAKER ROAD

NO BREEDING,
QUAKER ROAD

NO BREEDING,
QUAKER ROAD

QUAKER ROAD

OPENED 1 PIPE,
QUAKER ROAD

QUAKER ROAD

QUAKER ROAD

OPNED 1 PIPE,
QUAKER ROAD

CHAINSAW
WORK, QUAKER
ROAD

QUAKER ROAD

OPENED 1 PIPE,
QUAKER ROAD

OPENED 1 PIPE,
QUAKER ROAD

OPENED 1 PIPE,
QUAKER ROAD

OPENED 1PIPE,
QUAKER ROAD

OPENED 1 PIPE,
QUAKER ROAD

QUAKER ROAD

CHAINSAW WORK, QUAKER OPENED 1 PIPE, QUAKER ROAD
QUAKER ROAD OPENED 1 PIPE, QUAKER ROAD
NO BREEDING, QUAKER ROAD
NO BREEDING, QUAKER ROAD
QUAKER ROAD
QUAKER ROAD
OPENED 1 PIPE, QUAKER ROAD
OPENED 1 PIPE, QUAKER ROAD
QUAKER ROAD
CHAINSAW WORK, QUAKER ROAD
OPENED 2 PIPES, QUAKER ROAD
QUAKER ROAD
OPENED 1 PIPE, QUAKER ROAD
QUAKER ROAD
CHAINSAW WORK, QUAKER ROAD
OPENED 1 PIPE, QUAKER ROAD
QUAKER ROAD
CHAINSAW WORK, QUAKER ROAD
QUAKER ROAD
CHAINSAW WORK, QUAKER ROAD
QUAKER ROAD
OPENED 2 PIPES, QUAKER ROAD
QUAKER ROAD
NO BREEDING, QUAKER ROAD

QUAKER RD
1 PIPE SNAKED, QUAKER RD
20? CLEARED, 1 PIPE CLEARED, BIRCH LANE
QUAKER ROAD
OPENED 1 PIPE, QUAKER ROAD
QUAKER ROAD
OPENED 1 PIPE, QUAKER ROAD
QUAKER ROAD
QUAKER ROAD
QUAKER ROAD
OPENED 2 PIPE, QUAKER ROAD
OPENED 1PIPE, QUAKER ROAD
OPEEND 1 PIPE, QUAKER ROAD
QUAKER ROAD
OPENED 1 PIPE, QUAKER ROAD
QUAKER ROAD
QUAKER ROAD
OPENED 2 PIPES, QUAKER ROAD
QUAKER ROAD
OPENED 1PIPE, QUAKER ROAD

SITE ID	WORK DATE	WORK AMOUNT	WORK TYPE	SERIAL AMOUNT	MATERIAL	BRAND
389	5/14/2007		CHECKED			
389	5/17/2007		CHECKED	1.5	GB0 (GAL)	GB-1111
389	4/30/2007	1	SNAKED			
389	7/6/2007		CHECKED			
389	6/12/2007	30	SHOVELED			
389	6/12/2007	1	SNAKED			
389	6/14/2007	1	OTHER			
389	4/27/2007	2	OTHER			
389	4/27/2007	70	CLEANED			
389	5/10/2007		CHECKED			
389	5/11/2007		OTHER			
389	4/29/2008		SNAKED			
389	4/29/2008	60	CLEANED			
389	2/18/1993		SNAKED			
389	7/16/1993		CHECKED	10	BTI (LBS)	BACTIMO S PELLETT
389	7/30/1993		CHECKED	5	BTI (LBS)	BACTIMO S PELLETT
389	7/30/1993		SNAKED			
389	8/9/1993		CHECKED			
389	8/30/2007		CHECKED	16	BTI (OZ)	AQUABA C XT
389	9/20/2006		CHECKED			
389	7/28/1994		CHECKED	15	BTI (LBS)	
389	8/16/1994		CHECKED	10	BTI (LBS)	

389	4/24/1995
389	5/12/1995
389	5/12/1995
389	5/17/1995
389	5/17/1995
389	7/31/1995
389	4/4/1996
389	4/29/1996
389	5/22/1996
389	5/22/1996
389	6/24/1996
389	7/25/1996
389	8/19/1996
389	8/28/1996
389	8/28/1996
389	10/21/1996
389	10/31/1996
389	11/7/1996

CHECKED	10 BTI (LBS)	BACTIMO S PELLETT
CHECKED	5 BTI (LBS)	BACTIMO S PELLETT
SNAKED		
CHECKED	5 BTI (LBS)	BACTIMO S PELLETT
SNAKED		
CHECKED		
CHECKED	5 BTI (LBS)	BACTIMO S PELLETT
CHECKED	15 BTI (LBS)	BACTIMO S PELLETT
CHECKED		
SNAKED		
CHECKED		
SNAKED		
CHECKED	10 BTI (LBS)	AQUABA C
CHECKED		
SNAKED		
CHECKED		
SNAKED		
SNAKED		

389	11/7/1996	140	CLEANED		
389	11/19/1996	140	CLEANED		
389	11/19/1996		SNAKED		
389	3/13/1997		SNAKED		
389	3/13/1997	120	CLEANED		
389	3/14/1997	40	SHOVELED		
389	3/14/1997		SNAKED		
389	4/17/1997		CHECKED	10 BTI (LBS)	BACTIMOS GRANNULAR
389	4/29/1997		SNAKED		
389	5/13/1997		CHECKED	20 BTI (LBS)	BACTIMOS GRANNULAR
389	5/14/1997		CHECKED		
389	6/3/1997		SNAKED		
389	8/12/1997		CHECKED		
389	8/12/1997		SNAKED		
389	8/1/1997		CHECKED		
389	7/10/1997		CHECKED		
389	6/18/1997		CHECKED		
389	9/25/1997	170	CLEANED		
389	9/25/1997		SNAKED		

389	1/7/1998		389	180	180		
389	1/12/1998		CLEANED				
389	1/12/1998		389	260	260		
389	1/23/1998		CLEANED				
389	2/12/1998		389				
			389				
389	2/19/1998		CLEANED				
389	3/10/1998		389				
389	4/9/1998		CHECKED	10	10	BTI (OZ)	AQUABA C
389	3/2/1999		389				
			389				
389	3/3/1999		CLEANED				
389	3/22/1999		389				
			389				
389	4/23/1999		CLEANED				
389	4/23/1999		CHECKED	20	20	BTI (OZ)	AQUABA C
389	4/30/1999		CHECKED				
389	5/14/1999		CHECKED	10	10	BTI (OZ)	AQUABA C
389	6/3/1999		CHECKED				
389	6/7/1999		CHECKED				
389	6/15/1999		CHECKED				
389	6/23/1999		CHECKED				
389	6/23/1999		CHECKED				

389	6/29/1999		CHECKED		
389	7/7/1999		CHECKED		
389	8/4/1999		CHECKED		
389	10/22/1999	500	BRUSHED		
389	10/25/1999	530	BRUSHED		
389	10/25/1999	50	CLEANED		
389	10/25/1999		SNAKED		
389	10/28/1999		SNAKED		
389	1/31/2000		SNAKED		
389	4/11/2000		CHECKED		
389	5/17/2000		CHECKED	0.5	GB0 (GAL) GB-1111
389	5/17/2000		CHECKED	0.5	GB0 (GAL) GB-1111
389	8/15/2000		CHECKED	10	BTI (OZ) VECTOB AC
389	8/30/2000		CHECKED		
389	9/12/2000		CHECKED		
389	2/6/2001	140	CLEANED		
389	2/6/2001		SNAKED		
389	3/13/2001		SNAKED		
389	4/24/2001		SNAKED		
389	4/24/2001		CHECKED	36	BTI (OZ) VECTOB AC
389	5/16/2001		CHECKED	20	BTI (OZ) VECTOB AC

389	5/16/2001		SNAKED		
389	6/5/2001		SNAKED		
389	6/18/2001		CHECKED	10 BTI (OZ)	VECTOB AC
389	7/16/2001		CHECKED		
389	3/26/2002		SNAKED		
389	4/17/2002		CHECKED	18 BTI (OZ)	TEKNAR HP-D
389	4/19/2002		CHECKED	8 BTI (OZ)	TEKNAR HP-D
389	11/13/2002		SNAKED		
389	12/16/2002		SNAKED		
389	12/16/2002	60	CLEANED		
389	2/26/2003		SNAKED		
389	3/6/2003		SNAKED		
389	3/6/2003	120	CLEANED		
389	3/14/2003		SNAKED		
389	3/14/2003	80	CLEANED		
389	4/2/2003		SNAKED		
389	4/24/2003		CHECKED	16 BTI (OZ)	TEKNAR HP-D
389	5/29/2003		CHECKED	20 BTI (OZ)	AQUABA C XT
389	6/21/2003		CHECKED	0.25 GBO (GAL)	GB-1111
389	8/19/2003		CHECKED		
389	8/20/2003		CHECKED		
389	11/19/2003	430	BRUSHED		

389	11/19/2003	190	CLEANED		
389	11/19/2003		SNAKED		
389	2/11/2004	260	CLEANED		
389	2/11/2004		SNAKED		
389	3/29/2004		SNAKED		
389	8/12/2004		CHECKED		
389	5/11/2004		CHECKED	0.5	GBO (GAL) GB-1111
389	4/27/2004		CHECKED		
389	4/28/2004		SNAKED		
389	4/30/2004		CHECKED	30	BTI (OZ) AQUABA C XT
389	2/22/2005		CHECKED		
389	3/4/2005		SNAKED		
389	3/4/2005	160	CLEANED		
389	5/5/2005		SNAKED		
389	5/5/2005		CHECKED	1	GBO (GAL) GB-1111
389	5/6/2005		SNAKED		
389	11/2/2005	450	CLEANED		
389	11/4/2005	300	CLEANED		
389	11/4/2005		SNAKED		
389	11/4/2005	540	BRUSHED		
389	10/25/2005		SNAKED		
389	10/25/2005	20	SHOVELED		

389	10/25/2005		80	SNAKED		
389	1/3/2006			SNAKED		
389	1/3/2006		80	CLEANED		
389	4/28/2006			SNAKED		
389	5/27/2008		0	CHECKED	0.25	GBO (GAL) GB-1111
389	5/22/2008		0	CHECKED	24	BTI (OZ) AQUABA C XT
389	5/22/2008		0	CHECKED	0.5	GBO (GAL) GB-1111
389	6/24/2008		0	CHECKED	0	
389	6/25/2008		0	CHECKED	0	
389	9/16/2008		0	CHECKED	16	BTI (OZ) AQUABA C XT
389	2/27/2009		340	BRUSHED	0	
389	2/27/2009		50	CLEANED	0	
389	4/6/2009		0	CHECKED	0	
389	4/7/2009		0	CHECKED	0	
389	4/8/2009		0	CHECKED	0	
389	5/8/2009		0	CHECKED	1.25	GBO (GAL) GB-1111
389	5/27/2009		50	CLEANED	0	

COMMENTS
FIRE STATION ROAD (OPEN)
FIRE STATION ROAD
FIRE STATION ROAD (1 PIPE OPENED)
NO BREEDING, FIRE STATION ROAD
FIRE STATION
FIRE STATION
FIRE STATION ROAD (1 PIPE OPENED)
FIRE STATION ROAD (2 PIPES OPENED)
FIRE STATION ROAD
FIRE STATION ROAD(BLOCKED)
FIRE STATION ROAD (1 PIPE OPENED)
OPENED 1 PIPE, WINNIAKENEN WINNIAKENEN 2 PIPES SNAKED
STAGE 2-4
1 PIPE OPENED
1 PIPE OPENED NO BREEDING
SEAPUIT ?

FIRE STATION ROAD
FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
NO BREEDING, FIRE STATION ROAD
PARKER AND FIRE STATION ROAD
FIRE STATION ROAD
NO BREEDING, FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
NO BREEDING, FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
FIRE STATION ROAD
NO BREEDING, FIRE STATION ROAD
OPENED 2 PIPES, FIRE STATION ROAD
CHECKED PIPE AT FIRE STATION ROAD
OPENED 2 PIPES, FIRE STATION ROAD
OPENED 2 PIPES, FIRE STATION ROAD

FIRE STATION ROAD
FIRE STATION ROAD
OPENED 2 PIPES, FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
FIRE STATION ROAD
FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
FIRE STATION ROAD
NO BREEDING, SWALLOW HILL
OPENED 1 PIPE, FIRE STATION ROAD
NO BREEDING, FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
NO BREEDING, FIRE STATION ROAD
NO BREEDING, FIRE STATION
NO BREEDING, FIRE STATION
FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD

OPENED 1 PIPE, SEAPUIT
FIRE STATION ROAD
OPENED 2 PIPES, FIRE STATION ROAD
SEAPUIT ROAD
OPENED 1 PIPE, FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
FIRE STATION
OPENED 1 PIPE, FIRE STATION ROAD
OPENED 2 PIPES, FIRE STATION ROAD
FIRE STATION ROAD
FIRE STATION
FIRE STATION
NO BREEDING, FIRE STATION
NO BREEDING, FIRE STATION ROAD
NO BREEDING, FIRE STATION
NO BREEDING, FIRE STATION ROAD
NO BREEDING / FIRE STATION ROAD

NO BREEDING / FIRE STATION ROAD
NO BREEDING, FIRE STATION
NO BREEDING, FIRE STATION ROAD
FIRE STATION ROAD
FIRE STATION ROAD
FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION
OPENED 1 PIPE, FIRE STATION ROAD
NO BREEDING, FIRE STATION ROAD
FIRE STATION ROAD
BLUE HERON FIRE STATION ROAD
NO BREEDING, QUAIL
NO BREEDING, FIRE STATION FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION
FIRE STATION FIRE STATION ROAD

OPENED 1 PIPE, FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION FIRE STATION ROAD
NO BREEDING, FIRE STATION
OPENED 1 PIPE, FIRE STATION ROAD
FIRE STATION
QUAIL ROAD
OPENED 1 PIPE, FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
OPENED 2 PIPES, FIRE STATION ROAD
FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
FIRE STATION
FIRE STATION
FOX DEN BLUFF
NO BREEDING, OYSTER HARBORS
NO BREEDING, FIRE STATION
FIRE STATION

FIRE STATION
OPENED 1 PIPE, FIRE STATION
FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
OPENED 3 PIPES, FIRE STATION
NO BREEDING, FIRE STATION ROAD
SEAVIEW AVENUE
NO BREEDING, FIRE STATION
OPENED 1 PIPE, FIRE STATION ROAD
FIRE STATION ROAD
FIRE STATION ROAD
OPENED 1PIPE, FIRE STATION
FIRE STATION ROAD
OPENED 1 PIPE, FIRE STATION ROAD
FIRE STATION
OPENED 1PIPE, FIRE STATION
SEAPUIT
FIRE STATION
OPENED 2 PIPES, FIRE STATION
FIRE STATION
OPENED 1 PIPE, BLUE HERON WAY
BLUE HERON WAY

OPENED 1 PIPE, BLUE HERON WAY
OPENED 1 PIPE, SEAPUIT SEAPUIT
OPENED 1 PIPE, FIRE STATION ROAD
NO BREEDING
NO BREEDING
NO BREEDING
NO BREEDING
NO BREEDING

SITE ID	WORK DATE	DRK AMOU	WORK TYPE	ERIAL AMC	MATERIAL	BRAND
730K	4/25/2007		CHECKED			
730K	3/12/2007	300	CLEANED			
730K	3/12/2007	20	SHOVELED			
730K	3/30/2007	750	BRUSHED			
730K	3/30/2007	50	CLEANED			
730K	3/30/2007		CHAINSAW			
730K	6/5/2007		CHECKED			
730K	5/9/2007		CHECKED			
730K	3/12/2007	300	CLEANED			
730K	3/12/2007	20	SHOVELED			
730K	5/29/2007		CHECKED	0.25	GBO (GAL)	GB-1111
730K	12/29/2006	400	CLEANED			
730K	5/8/2006		CHECKED			
730K	5/8/2006		CHECKED			
730K	5/8/2006		CHECKED			
730K	5/8/2006		CHECKED			
730K	5/8/2006		CHECKED			
730K	5/8/2006		CHECKED			
730K	5/8/2006		CHECKED			
730K	5/8/2006		CHECKED			
730K	5/8/2006		CHECKED			
730K	5/8/2006		CHECKED			
730K	6/12/2006		CHECKED	1	BTI (LBS)	AQUABA C G
730K	6/12/2006		CHECKED	1	BTI (LBS)	AQUABA C G
730K	6/12/2006		CHECKED	1	BTI (LBS)	AQUABA C G
730K	6/12/2006		CHECKED	1	BTI (LBS)	AQUABA C G
730K	6/12/2006		CHECKED	1	BTI (LBS)	AQUABA C G
730K	6/12/2006		CHECKED	1	BTI (LBS)	AQUABA C G
730K	10/31/2006	600	BRUSHED			
730K	10/31/2006	600	BRUSHED			
730K	10/31/2006	600	BRUSHED			
730K	11/1/2006	700	CLEANED			
730K	11/1/2006	700	CLEANED			
730K	11/1/2006	700	CLEANED			
730K	11/2/2006	50	BRUSHED			
730K	11/2/2006	50	BRUSHED			
730K	11/2/2006	50	BRUSHED			
730K	5/5/1994		SNAKED			
730K	4/21/1994		CHECKED			
730K	4/21/1994		CHECKED			
730K	6/21/1994		CHECKED	5	BTI (LBS)	
730K	12/28/1994	200	CLEANED			
730K	12/28/1994		SNAKED			

730K	4/18/1995		CHECKED	15	BTI (LBS)	BACTIMO S PELLETT
730K	5/16/1995		CHECKED			
730K	5/16/1995		CHECKED	10	BTI (LBS)	BACTIMO S PELLETT
730K	6/15/1995		CHECKED	5	BTI (LBS)	BACTIMO S PELLETT
730K	7/31/1995		CHECKED	5	BTI (LBS)	BACTIMO S PELLETT
730K	11/27/1995	100	CLEANED			
730K	1/3/1996	150	CLEANED			
730K	1/3/1996		SNAKED			
730K	2/12/1996	100	CLEANED			
730K	2/12/1996		SNAKED			
730K	2/12/1996	250	BRUSHED			
730K	5/15/1996		CHECKED	5	BTI (LBS)	BACTIMO S GRANNU LAR
730K	5/15/1996		CHECKED	10	BTI (LBS)	BACTIMO S GRANNU LAR
730K	9/15/1997		CHECKED	5	BTI (LBS)	BACTIMO S GRANNU LAR
730K	1/27/1999	800	BRUSHED			
730K	1/27/1999	200	CLEANED			
730K	1/28/1999	300	CLEANED			
730K	5/21/1999		CHECKED	5	BTI (OZ)	AQUABA C
730K	5/15/2000		CHECKED			
730K	6/6/2000		CHECKED	10	BTI (OZ)	VECTOB AC
730K	7/19/2000		BRUSHED			
730K	8/9/2000		CHECKED	5	BTI (OZ)	VECTOB AC
730K	5/11/2000		CHECKED	2.5	BTI (OZ)	VECTOB AC
730K	10/13/2000	550	BRUSHED			
730K	9/18/2000		CHECKED	5	BTI (OZ)	VECTOB AC
730K	10/16/2000	450	BRUSHED			

730K	10/16/2000	80	CLEANED			
730K	10/17/2000	400	BRUSHED			
730K	11/7/2000	200	BRUSHED			
730K	11/7/2000	200	CLEANED			
730K	6/28/2001		CHECKED	5	BTI (OZ)	VECTOB AC
730K	7/20/2001		CHECKED	5	BTI (OZ)	VECTOB AC
730K	8/2/2001		CHECKED	5	BTI (OZ)	VECTOB AC
730K	4/30/2002		CHECKED	5	BTI (OZ)	TEKNAR HP-D
730K	5/2/2002		CHECKED	10	BTI (OZ)	TEKNAR HP-D
730K	3/21/2002	200	CLEANED			
730K	6/7/2002		CHECKED	5	BTI (OZ)	TEKNAR HP-D
730K	10/9/2002		CHECKED	3	BTI (OZ)	TEKNAR HP-D
730K	12/26/2002	200	CLEANED			
730K	1/27/2003	100	BRUSHED			
730K	3/28/2003		SNAKED			
730K	5/1/2003		CHECKED	1	BTI (OZ)	TEKNAR HP-D
730K	5/1/2003		CHECKED	3	BTI (OZ)	TEKNAR HP-D
730K	6/2/2003		CHECKED			
730K	6/28/2003		CHECKED	0.5	GBO (GAL)	GB-1111
730K	12/12/2003	450	CLEANED			
730K	12/12/2003		SNAKED			
730K	4/24/2004		CHECKED	10	BTI (OZ)	AQUABA C XT
730K	7/15/2004		CHECKED			
730K	10/26/2004	200	CLEANED			
730K	10/27/2004	500	BRUSHED			
730K	9/10/2004		CHECKED			
730K	4/16/2004		CHECKED			
730K	3/3/2005	50	BRUSHED			
730K	2/7/2005	200	CLEANED			
730K	4/25/2005		CHECKED	3	BTI (OZ)	AQUABA C XT
730K	4/25/2005		CHECKED	3	BTI (OZ)	AQUABA C XT
730K	5/11/2005		CHECKED			
730K	5/20/2005		CHECKED			
730K	6/8/2005		CHECKED			
730K	6/8/2005		CHECKED			
730K	6/16/2005		CHECKED			
730K	4/18/2006		CHECKED	2	BTI (OZ)	AQUABA C XT

730K	4/18/2006		CHECKED	11	BTI (OZ)	AQUABA C XT
730K	2/15/2006	500	BRUSHED			

NAMSKAKET ROAD
NO BREEDING
OLD AIRPORT
AIRPORT
OLD AIRPORT
NAMSKAKET ROAD
BUCKLEY'S BOGS
OPENED 1 PIPE, BUCKLEY'S BOGS
BOGS
BUCKEYE BOGS
OPENED 1 PIPE, BUCKEYE BOGS
BUCKEYE BOGS
SEABREEZE
OLD AIRPORT
AIRPORT
BUCKLEYS
BUCKLEYS
BUCKLEYS
SEABREEZE
NO BREEDING, BUCKLEYS BOGS
OLD AIRPORT
CHAIN SAW WORK, OLD AIRPORT
AIRPORT
OLD AIRPORT
OLD AIRPORT
OLD AIRPORT

OLD AIRPORT
OLD AIRPORT
BUCKLEY BOGS
BUCKLEY BOGS
OLD AIRPORT
BUCKLEY BOG
AIRPORT
CAPT LINNELL
AIRPORT
AIRPORT
OLD AIRPORT
OLD AIRPORT
OLD AIRPORT
CAPTAIN LINNELL HOUSE
OPENED 2PIPES, OLD AIRPORT
CAPTAIN LINNELL HOUSE
OLD AIRPORT
NO BREEDING, OLD AIRPORT
OLD AIRPORT
OLD AIRPORT
OPENED 1 PIPE, OLD AIRPORT
OLD AIRPORT
NO BREEDING, OLD AIRPORT
OLD AIRPORT
SKAKET CIRCLE
NO BREEDING, OLD AIRPORT
NO BREEDING, OLD AIRPORT
CAPTAIN LINNELL HOUSE
OLD AIRPORT
OLD AIRPORT
OLD AIRPORT
NO BREEDING, OLD AIRPORT
NO BREEDING, OLD AIRPORT
NO BREEDING, OLD AIRPORT
NO BREEDING, OLD AIRPORT
NO BREEDING, AIRPORT
CAPTAIN LINELL HOUSE

OLD AIRPORT
OLD AIRPORT

SITE ID	WORK DATE	WORK AMOUNT	WORK TYPE	SERIAL AMOUNT	MATERIAL	BRAND
845	4/14/2007	1	PIPE OPENED			
845	5/18/2007	30	CLEANED			
845	5/18/2007	1	SNAKED			
845	9/24/2007		CHECKED			
845	6/5/2007		SNAKED			
845	12/20/2007		SNAKED			
845	1/8/2008	20	SHOVELED			
845	3/19/2008		SNAKED			
845	5/1/2008		SNAKED			
845	2/15/2007		SNAKED			
845	6/1/1931		CHECKED	2.5	GBO (GAL)	GB-1111
845	6/1/1931		CHECKED	2.5	GBO (GAL)	GB-1111
845	7/6/2006	1	SNAKED			
845	7/6/2006	1	SNAKED			
845	8/29/2006		SNAKED			
845	8/29/2006		SNAKED			
845	11/7/2006	200	BRUSHED			
845	11/7/2006	200	BRUSHED			
845	11/7/2006	200	CLEANED			
845	11/7/2006	200	CLEANED			
845	11/7/2006	20	SHOVELED			
845	11/7/2006	20	SHOVELED			
845	2/22/1993	50	CLEANED			
845	2/22/1993		SNAKED			
845	4/13/1993		CHECKED	5	BTI (LBS)	BACTIMO S PELLETT
845	4/23/1993		CHECKED	15	BTI (LBS)	BACTIMO S PELLETT
845	9/9/1993		SNAKED			
845	10/15/1993	150	BRUSHED			
845	10/15/1993	150	CLEANED			
845	10/15/1993	20	SHOVELED			
845	10/27/1993		SNAKED			

845	12/7/1993		SNAKED		
845	5/5/1994		SNAKED		
845	4/25/1994		CHECKED	6 BTI (LBS)	
845	5/31/1994		CHECKED		
845	3/29/1994		CHECKED		
845	8/3/1994	10	CLEANED		
845	8/3/1994		SNAKED		
845	2/21/1995	30	CLEANED		
845	5/8/1995	20	CLEANED		
845	5/8/1995		SNAKED		
845	6/15/1995		SNAKED		
845	7/31/1995		SNAKED		
845	10/10/1995		SNAKED		
845	1/24/1996		SNAKED		
845	3/5/1996		SNAKED		
845	3/13/1996	150	CLEANED		
845	3/13/1996	40	SHOVELED		
845	8/13/1996		SNAKED		
845	9/13/1996		SNAKED		
845	9/26/1996		SNAKED		
845	12/6/1996		SNAKED		
845	2/4/1997	150	BRUSHED		
845	2/4/1997	150	CLEANED		
845	2/4/1997		SNAKED		
845	3/10/1997		SNAKED		
845	4/2/1997		SNAKED		
845	4/4/1997	20	CLEANED		
845	4/4/1997		SNAKED		

845	5/6/1997		CHECKED	8 BTI (LBS)	BACTIMO S GRANNU LAR
845	5/19/1997		SNAKED		
845	5/27/1997		SNAKED		
845	8/13/1997		SNAKED		
845	12/10/1997	120	BRUSHED		
845	12/10/1997	120	CLEANED		
845	12/10/1997		SNAKED		
845	12/10/1997	10	SHOVELED		
845	12/30/1997		SNAKED		
845	7/29/1998		SNAKED		
845	1/29/1998	10	CLEANED		
845	2/10/1998		SNAKED		
845	2/12/1998		SNAKED		
845	2/24/1998		SNAKED		
845	3/20/1998	25	CLEANED		
845	3/20/1998		SNAKED		
845	4/10/1998		CHECKED		
845	6/15/1998		SNAKED		
845	6/30/1998		SNAKED		
845	9/8/1998		SNAKED		
845	6/30/1998		SNAKED		
845	6/30/1998		SNAKED		
845	11/13/1998	120	BRUSHED		
845	11/13/1998	120	CLEANED		
845	11/13/1998		SNAKED		
845	2/3/1999		SNAKED		
845	3/1/1999		SNAKED		

845	5/14/2002		SNAKED			
845	5/17/2002		CHECKED	20	BTI (OZ)	TEKNAR HP-D
845	11/20/2002	10	SHOVELED			
845	11/20/2002		SNAKED			
845	12/18/2002		SNAKED			
845	12/18/2002	10	SHOVELED			
845	12/18/2002	50	CLEANED			
845	1/6/2003		SNAKED			
845	2/20/2003		SNAKED			
845	2/24/2003		SNAKED			
845	2/28/2003		SNAKED			
845	3/5/2003		SNAKED			
845	3/5/2003	20	SHOVELED			
845	3/18/2003	80	CLEANED			
845	3/18/2003	20	SHOVELED			
845	3/19/2003	100	CLEANED			
845	3/31/2003		SNAKED			
845	3/31/2003	30	CLEANED			
845	4/1/2003		SNAKED			
845	4/2/2003		SNAKED			
845	11/4/2003		SNAKED			
845	11/25/2003		SNAKED			
845	11/25/2003	30	SHOVELED			
845	11/26/2003	250	BRUSHED			
845	11/26/2003	250	CLEANED			
845	11/26/2003	30	SHOVELED			
845	12/4/2003		SNAKED			
845	12/4/2003	20	SHOVELED			
845	12/12/2003		CHECKED			
845	2/18/2004		SNAKED			
845	4/2/2004	10	SHOVELED			
845	4/2/2004		SNAKED			
845	3/24/2004	50	SHOVELED			

845	4/6/2004		SNAKED		
845	4/15/2004		SNAKED		
845	4/15/2004		CHECKED		
845	8/16/2004	20	CLEANED		
845	8/16/2004		SNAKED		
845	5/25/2004		SNAKED		
845	9/29/2004		SNAKED		
845	11/2/2004		PIPE INSTALLED		
845	11/19/2004	300	BRUSHED		
845	11/19/2004	300	CLEANED		
845	1/10/2005		SNAKED		
845	2/23/2005		SNAKED		
845	2/23/2005	40	CLEANED		
845	3/9/2005		SNAKED		
845	4/4/2005	50	CLEANED		
845	4/4/2005		SNAKED		
845	4/7/2005		SNAKED		
845	5/9/2005		SNAKED		
845	5/25/2005		CHECKED	1	GB-1111
845	7/1/2005		CHECKED	0.5	GB-1111
845	8/31/2005		SNAKED		
845	10/11/2005		SNAKED		
845	10/25/2005		SNAKED		
845	11/7/2005	250	BRUSHED		
845	1/23/2006		SNAKED		
845	1/23/2006		SNAKED		
845	1/23/2006	20	CLEANED		
845	5/4/2006		SNAKED		
845	5/16/2006		CHECKED		
845	9/30/2008	0		0	
845	1/8/2009	0		0	
845	3/4/2009	1	SNAKED	0	

845	2/18/2009	1	OTHER	0		
845	3/31/2008	1	SNAKED	0		
845	4/21/2009	0	CHECKED	5	BTI (OZ)	AQUABA C XT

COMMENTS
CAMPGROUND BEACH (PIPE OPENED)
CAMPGROUND BEACH
CAMPGROUND BEACH (1 PIPE OPENED)
NO BREEDING, CAMPGROUND BEACH ROAD
OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH
CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH
CAMPGROUND BEACH
KINGS BRERRY RD
KINGS BRERRY RD
CAMPGROUND BEACH 1 PIPE OPENED
CAMPGROUND BEACH 1 PIPE OPENED
1 PIPE OPENED
CAMPGROUND BEACH 1 PIPE OPENED
CAMPGROUND BEACH
1 PIPE CLEANED
1 PIPE CLEANED
1 PIPE OPENED
1 PIPE OPENED

1 PIPE OPENED
1 PIPE SNAKED
STAGE 2-3
1 PIPE OPENED
1 PIPE OPENED
OPENED 1 PIPE
CAMPGROUND BEACH ROAD
CAMPGROUND ROAD
OPENED 1 PIPE, CAMPGROUND ROAD
OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND
OPENED 1 PIPE, CAMPGROUND BEACH ROAD
OPENED 1 PIPE, CAMPGROUND ROAD
OPENED 1 PIPE, CAMPGROUND BEACH
CAMPGROUND BEACH ROAD
CAMPGROUND BEACH ROAD
OPENED 1 PIPE, CAMPGROUND BEACH
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CAMPGROUND ROAD
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OPENED 1 PIPE, CAMPGROUND BEACH
CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND
OPENED 1 PIPE, CAMPGROUND AREA
OPENED 1 PIPE, CAMPGROUND ROAD
OPENED 1 PIPE, CAMPGROUND
CAMPGROUND ROAD
OPENED 1 PIPE, CAMPGROUND
CAMPGROUND BEACH ROAD
CAMPGROUND BEACH ROAD
OPENED 1 PIPE, CAMPGROUND BEACH ROAD
OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH

CAMPGROUND BEACH
CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND
CAMPGROUND
OPENED 1 PIPE, CAMPGROUND BEACH
NO BREEDING, CAMPGROUND BEACH
CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH
CAMPGROUND ROAD
CAMPGROUND ROAD
CAMPGROUND ROAD
OPENED 1 PIPE, CAMPGROUND ROAD
OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND
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CAMPGROUND BEACH
CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH
BRIDGE ROAD

OPENED 1 PIPE, CAMPGROUND BEACH
BRIDGE ROAD
CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUNDS
CAMPGROUNDS
CAMPGROUNDS
OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND ROAD
CAMPGROUND ROAD
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CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND
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OPENED 1 PIPE, CAMPGROUND
CAMPGROUND BEACH

OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND
NO BREEDING, CAMPGROUND
CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH
REPLACED PIPE, CAMPGROUND BEACH
CAMPGROUND BEACH
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OPENED 1PIPE, CAMPGROUND BEACH
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OPENED 1 PIPE, CAMPGROUND BEACH
KINGSBURY BEACH
KINGSBERRY ROAD
OPENED 1 PIPE, CAMPGROUND
OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH
CAMPGROUND BEACH
OPENED 1 PIPE, CAMPGROUND BEACH
OPENED 1 PIPE, GOV PRENCE
GOV PRENCE
OPENED 1PIPE, CAMPGROUND BEACH
CAMPGROUND BEACH
OPEN PIPES (1);OTHER
OPEN PIPES (1)

OPEN PIPES (1)
OTHER
OTHER

AERIAL MOSQUITO LARVAL CONTROL PROGRAM – SPRING 2007

FRANK H. CORNINE III & TIMOTHY D. DESCHAMPS

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ABSTRACT

Aerial application of *Bacillus thuringiensis israelensis* (Bti) has become a standard procedure in many Massachusetts mosquito control programs. CMMCP used rotary aircraft over selected wetlands in Chelmsford, Billerica and Boxborough. Emergence of spring species of mosquitoes was reduced by 86.91% in targeted wetlands.

OBJECTIVE

To reduce the emergence of spring brood mosquito species *Ochlerotatus excrucians* and *Ochlerotatus abserratus* in the towns of Billerica, Chelmsford & Boxborough, with a secondary goal of reducing the early emergence of *Oc. canadensis* from the treated wetlands. *Oc. excrucians* and *Oc. abserratus* emerge in vast numbers from the targeted wetlands and result in significant adulticide requests in the early summer months. *Oc. canadensis* emerge throughout the late spring into summer, and can transmit important diseases like EEE to horses and humans¹.

MATERIALS AND METHODS

Using helicopter applications of a granular form of *Bacillus thuringiensis israelensis* (Bti), a non-reproducing bacteria used for the control of mosquito larvae, the total numbers of spring brood mosquitoes can be reduced. This is the same product used as part of our regular ground larval control program. First registered as an insecticide by the EPA in 1983, this form of the soil bacteria is active for approximately 48 hours and causes toxins in the mosquito larvae gut when ingested². The product chosen for the aerial larvicide was Vectobac G®. The suggested rate range provided by the manufacturer is 2.5-10lbs/acre, with CMMCP applying at 5lbs/acre. This is the standard application rate used by other mosquito control districts in Massachusetts. Maps of the treatment sites using GIS software will be prepared for the contractor. Our staff will collect pre- and post larval surveillance data. Wetlands that were chosen for the aerial application were based on several aspects including historical larval collection data, wetland acreage, resident density, and other factors. A contract has been established with North Fork Helicopters out of

Cutchogue, New York. The contract price per acre has been established at \$14.15. This contractor has been involved in aerial applications of Bti for several years.

DISCUSSION

Snowmelt and spring weather conditions typically contribute to standing pools of water that lend themselves to become ideal mosquito breeding habitat. Control of mosquito larvae in their aquatic habitat is a major focus of the integrated pest management program employed by the Central Mass. Mosquito Control Project (CMMCP). In response, CMMCP has organized an aerial larval control program using rotary aircraft (helicopter) in addition to the standard ground larval control program performed in all member cities and towns. The towns that participate in this program pay for this service under a separate appropriation than the program of mosquito control that is currently offered. This program is targeted at reducing the numbers of two "spring brood" species, *Ochlerotatus abserratus* and *Ochlerotatus excrucians*, in addition to reducing secondary target species *Ochlerotatus canadensis*. The spring brood species greatly contribute to significant mosquito populations experienced by residents in May through June, and *Oc. canadensis* is a concern for the transmission of EEE and WNV.

Although we have identified potential areas of mosquito breeding, we will only target these areas after confirmation is received from field observations (pre-surveillance). All areas will be sampled using established procedures and protocols established in the mosquito control Generic Environmental Impact Report. An average of 1 mosquito per dip over 10 dips will be used as a threshold to determine if an

¹http://www.mass.gov/dph/wnv/mosquito_descriptions_arbo_activity.pdf

²<http://www.epa.gov/pesticides/health/mosquitoes/larvicides4mosquitoes.htm>

application in that area is warranted, and we will have at least 1 dip station per 250 treated acres, with a control site as a monitoring device. Once confirmation in a wetland has been recorded, the area will be designated for treatment.

LARVAL MONITORING

Before any applications are made, recoverable dip stations (RDS) were established so that larval monitoring could be conducted at the same location both pre- and post application. In each town, RDS were placed outside the chosen treatment areas to act as a control site along with several RDS inside the treatment areas for mortality comparison. At each RDS there were 10 dip sites, where field technicians would record the number of mosquito larvae as well as their life stage (instar); then the larvae were returned to the RDS. All dip sites were clearly marked so that they could be accurately located and sampled again after the application. Species identified in the larval stage were *Oc. provocons* (potential vector of WNV), *Oc. abserratus* and *Oc. canadensis* (potential vector of EEE). All larvae were in the targeted instar range, 2-3rd instar.

SITE SELECTION

Specific wetland types over 1 acre have been outlined on the maps. These wetland types (wooded swamp deciduous, conifer & mixed; shallow marsh; shrub swamp) have been identified as the preferred habitat for the target species. Any sites under 5 acres that we identify as not suitable for this application will be removed for consideration and monitored and treated if necessary as part of our regular ground larval control program.

THE APPLICATION

Weather and mosquito larval instar are the determining factors in choosing the dates of application. Historically we have performed this program during the third week of April. This timeframe has shown to be a consistent time of year when larvae are in the target life stage, the second and third instar. According to the USGS, the water table in March was at normal levels, but rain in April caused them to rise to above normal³. A comment from the USGS website states:

“Ground-water levels were generally above normal (highest 25 percent of levels for April) throughout Massachusetts and Rhode Island. New record-high ground-water levels

for the month of April were measured in 10 wells in Massachusetts and 10 wells in Rhode Island; each of these wells has 10 or more years of monthly measurements.”

A majority of this rain in April fell during our typical application week (4.1 inches that week compared to 7.02 inches for the entire month) and caused us to postpone the application until the following week. The aerial larvicide took place over the course of two days, April 23rd for the town of Chelmsford, and April 24th for both Billerica and Boxborough. A landing zone in Chelmsford serves as the base of operations for Chelmsford & Billerica, and we secured permission from Stow Airport to use their facility as a base of operations for Boxborough. Approximately 713 acres were treated in Chelmsford, 557 acres in Billerica, and 562 acres in Boxborough. The Vectobac® material was transported to site prior to each application, and CMMCP staff members were on hand to load the helicopter.

Notifications were placed in the Lowell Sun for Chelmsford & Billerica, and The Beacon for the town of Boxborough for the week of April 19, 2007, as required under 333CMR 13.04:

“no applications of pesticides by aircraft shall be made unless the following conditions have been met: (a) Notification of the proposed application has been given by the Contracting Entity to the public residing on adjacent lands by publication of a notice in a newspaper of general circulation normally used by the municipality for legal notices not later than two days before the application and no sooner than ten days before application”⁴.

CONCLUSIONS

In general, the application was a success. Overall numbers show an 86.91% reduction in areas where Bti granules were present post-treatment. Control sites showed a 22.52% increase in larval activity. One deficiency noted in the program this year is the lack of Bti granules present in some of the RDS; this can be a result of irregular wetland shapes as well as the buffer zones pilots will employ around roads, yards and other areas of exclusion. For the 2008 application we may change the location or setup of some of the RDS, and will be sure to notify the pilot of the RDS locations.

³http://ma.water.usgs.gov/current_cond/cwrc_statements.htm

⁴http://www.mass.gov/agr/legal/regs/pesticides_regulations_list.htm

ACKNOWLEDGEMENTS

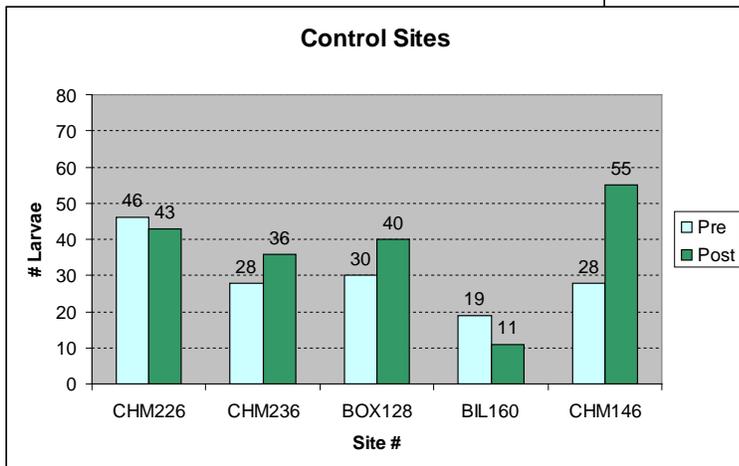
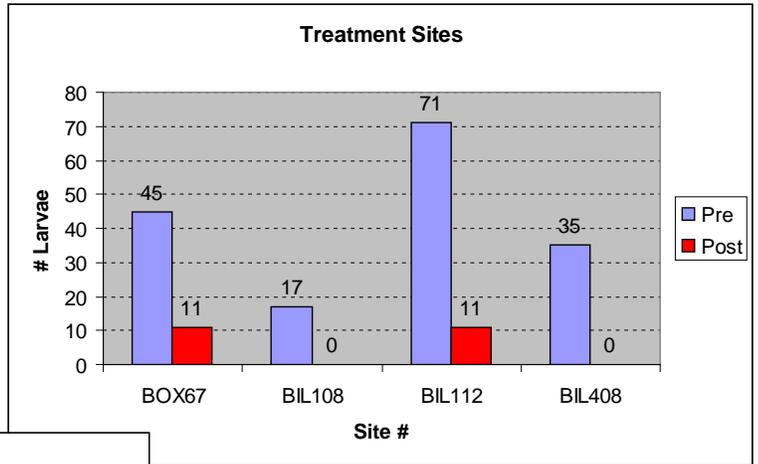
The authors would like to thank the towns of Chelmsford, Billerica and Boxborough; North Fork Helicopters for doing the application; Clarke Mosquito Control Products for supplying

the Bti; the CMMCP Commission, and most importantly the CMMCP staff for pre and post monitoring, wetland delineations, map generation and loading the aircraft.

OVERALL RESULTS:

Treatment Sites	24Hr Pre	48Hr Post	Observed Change
BOX67	45	11	- 75.55%
BIL108	17	0	- 100.00%
BIL112	71	11	- 84.51%
BIL408	35	0	- 100.00%
Overall:	168	22	- 86.91%
Control Sites	24Hr Pre	48Hr Post	Observed Change
CHM226	46	43	- 6.52%
CHM236	28	36	+ 28.57%
BOX128	30	40	+ 33.33%
BIL160	19	11	- 42.11%
CHM146	28	55	+ 96.43%
Overall:	151	185	+ 22.52%

Data shown above is from RDS sites where Bti granules were present post-treatment. Control Sites include data from RDS sites where there was no evidence of Bti granules in area during surveys conducted post-treatment.



CENTRAL MASS. MOSQUITO CONTROL PROJECT



AERIAL MOSQUITO LARVAL CONTROL PROGRAM

~
SPRING 2007

Frank H. Cornine III, *Field Biologist*
Timothy D. Deschamps, *Executive Director*



OBJECTIVE:

To reduce the emergence of spring brood mosquito species *Ochlerotatus excrucians* and *Ochlerotatus abserratus* in the towns of Billerica, Chelmsford & Boxborough, with a secondary goal of reducing the early emergence of *Oc. canadensis* from the treated wetlands. *Oc. excrucians* and *Oc. abserratus* emerge in vast numbers from the targeted wetlands and result in significant adulticide requests in the early summer months. *Oc. canadensis* emerge throughout the late spring into summer, and can transmit important diseases like EEE to horses and humans¹.

MATERIALS AND METHODS:

Using helicopter applications of a granular form of *Bacillus thuringiensis israelensis* (Bti), a non-reproducing bacteria used for the control of mosquito larvae, the total numbers of spring brood mosquitoes can be reduced. This is the same product used as part of our regular ground larval control program. First registered as an insecticide by the EPA in 1983, this form of the soil bacteria is active for approximately 48 hours and causes toxins in the mosquito larvae gut when ingested². The product



Bti granules

chosen for the aerial larvicide was Vectobac G®. The suggested rate range provided by the manufacturer is 2.5-10lbs/acre, with CMMCP applying at 5lbs/acre. This is the standard application rate used by other mosquito control districts in Massachusetts. Maps of the treatment sites using GIS software will be prepared for the contractor. Our staff will collect pre- and post larval surveillance data. Wetlands that were chosen for the aerial application were based on several aspects including historical larval collection data, wetland acreage, resident density, and other factors. A contract has been established with North Fork Helicopters out of Cutchogue, New York. The contract price per acre has been established at \$14.15. This contractor has been involved in aerial applications of Bti for several years.

DISCUSSION:

Snowmelt and spring weather conditions typically contribute to standing pools of water that lend themselves to become ideal mosquito breeding habitat. Control of mosquito larvae in their aquatic habitat is a major focus of the integrated mosquito management program employed by the Central Mass. Mosquito Control Project (CMMCP). In response, CMMCP has organized an aerial larval control program using rotary aircraft (helicopter) in addition to the standard ground larval control program performed in all member cities and towns. The towns that participate in this program pay for this service under a separate appropriation than the program of mosquito control that is currently offered. This program is targeted at reducing the numbers of two “spring brood” species, *Ochlerotatus abserratus* and *Ochlerotatus excrucians*, in addition to reducing

¹http://www.mass.gov/dph/wmv/mosquito_descriptions_arbo_activity.pdf

²<http://www.epa.gov/pesticides/health/mosquitoes/larvicides4mosquitoes.htm>

secondary target species *Ochlerotatus canadensis*. The spring brood species greatly contribute to significant mosquito populations experienced by residents in May through June, and *Oc. canadensis* is a concern for the transmission of EEE and WNV.

Although we have identified potential areas of mosquito breeding, we will only target these areas after confirmation is received from field observations (pre-surveillance). All areas will be sampled using established procedures and protocols established in the mosquito control Generic Environmental Impact Report. An average of 1 mosquito per dip over 10 dips will be used as a threshold to determine if an application in that area is warranted, and we will have at least 1 dip station per 250 treated acres, with a control site as a monitoring device. Once confirmation in a wetland has been recorded, the area will be designated for treatment.

LARVAL MONITORING:

Before any applications are made, recoverable dip stations (RDS) were established so that larval monitoring could be conducted at the same location both pre- and post application. In each town, RDS were placed outside the chosen treatment areas to act as a control site along with several RDS inside the treatment areas for mortality comparison. At each RDS there were 10 dip sites, where field technicians would record the number of mosquito larvae as well as their life stage (instar); then the larvae were returned to the RDS. All dip sites were clearly marked so that they could be accurately located and sampled again after the application. Species identified in the larval stage were *Oc. provocons* (potential vector of WNV), *Oc. abserratus* and *Oc. canadensis* (potential vector of EEE). All larvae were in the targeted instar range, 2-3rd instar.

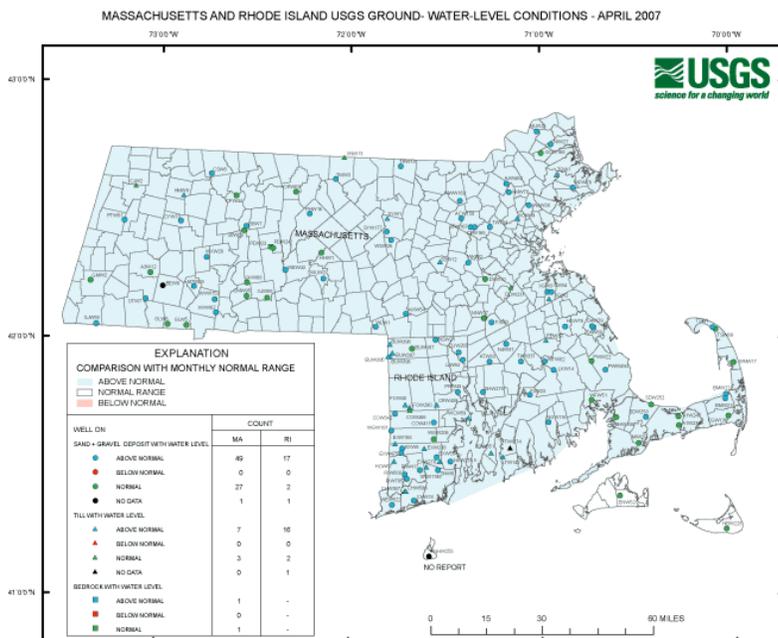
SITE SELECTION:

Specific wetland types over 1 acre have been outlined on the maps. These wetland types (wooded swamp deciduous, conifer & mixed; shallow marsh; shrub swamp) have been identified as the preferred habitat for the target species. Any sites under 5 acres that we identify as not suitable for this application will be removed for consideration and monitored and treated if necessary as part of our regular ground larval control program.

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THE APPLICATION:

Weather and mosquito larval instar are the determining factors in choosing the dates of application. Historically we have performed this program during the third week of April. This timeframe has shown to be a consistent time of year when larvae are in the



target life stage, the second and third instar. According to the USGS, the water table in March was at normal levels, but rain in April caused them to rise to above normal³. A comment from the USGS website states:

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The authors would like to thank the CMMCP Commission, residents and town officials in the towns of Billerica, Boxborough and Chelmsford.

³http://ma.water.usgs.gov/current_cond/cwrc_statements.htm

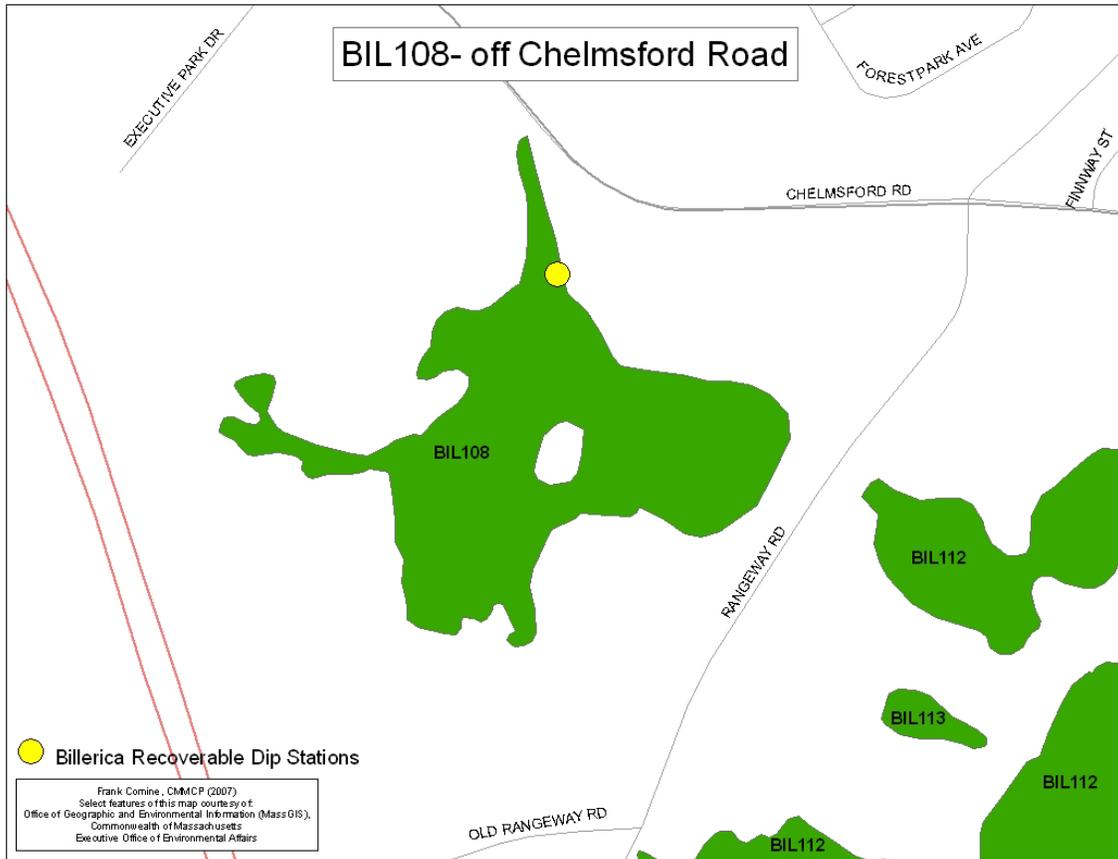


OVERALL RESULTS:

Treatment Sites	24Hr Pre	48Hr Post	Observed Change
T1	45	11	-75.55%
T3	17	0	-100.00%
T4	71	11	-84.51%
T5	35	0	-100.00%
Overall:	168	22	-86.91%
Control Sites	24Hr Pre	48Hr Post	Observed Change
C1	46	43	-6.52%
C2	28	36	28.57%
C3	30	40	33.33%
C4	19	11	-42.11%
C5	28	55	96.43%
Overall:	151	185	+22.52%

Data shown above is from RDS sites where Bti granules were present post-treatment. Control Sites include data from RDS sites where there was no evidence of Bti granules in area during surveys conducted post-treatment.

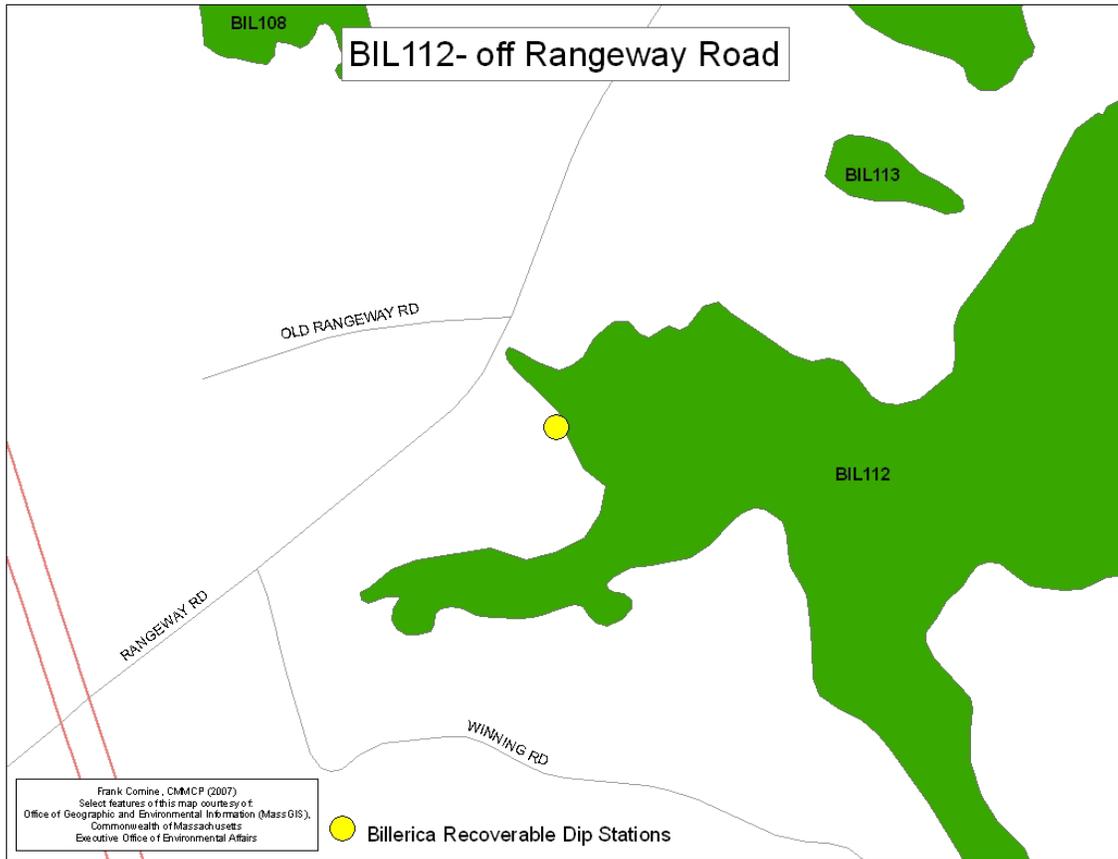
Town of Billerica Recoverable Dip Stations Data



This dip station showed excellent efficacy, exhibiting 100% reduction in mosquito larvae from the pre-application survey to the 48 hours post-application. There were Bti granules present at the RDS during the post survey

Dip Site #	18-Apr	23-Apr	24-Apr	25-Apr	26-Apr
1	1	3	Application	0	0
2	1	1		0	0
3	1	4		0	0
4	2	1		0	0
5	0	1		0	0
6	0	2		0	0
7	0	1		1	0
8	0	1		0	0
9	0	1		1	0
10	0	2		0	0
Total:	5	17		2	0

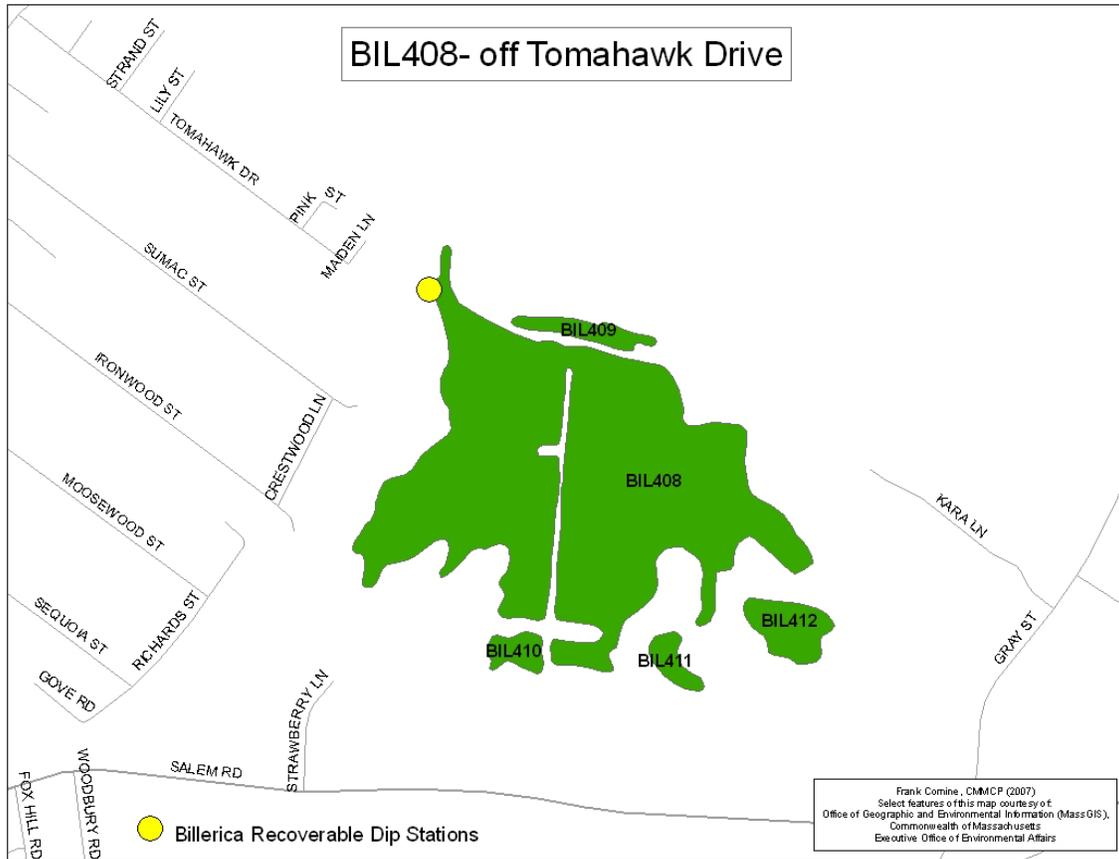
**Town of Billerica
Recoverable Dip Stations Data**



At this RDS there was an 84.51% reduction in mosquito larvae, although no 48 hour post survey was completed. If allowed another 24 hour period, the Bti granules may have increased this larvae reduction even further. Field technicians reported the presence of Bti granules at BIL112.

Dip Site #	23-Apr	24-Apr	25-Apr
1	5	Application	10
2	8		0
3	7		1
4	12		0
5	7		0
6	7		0
7	1		0
8	5		0
9	12		0
10	7		0
Total:	71		11

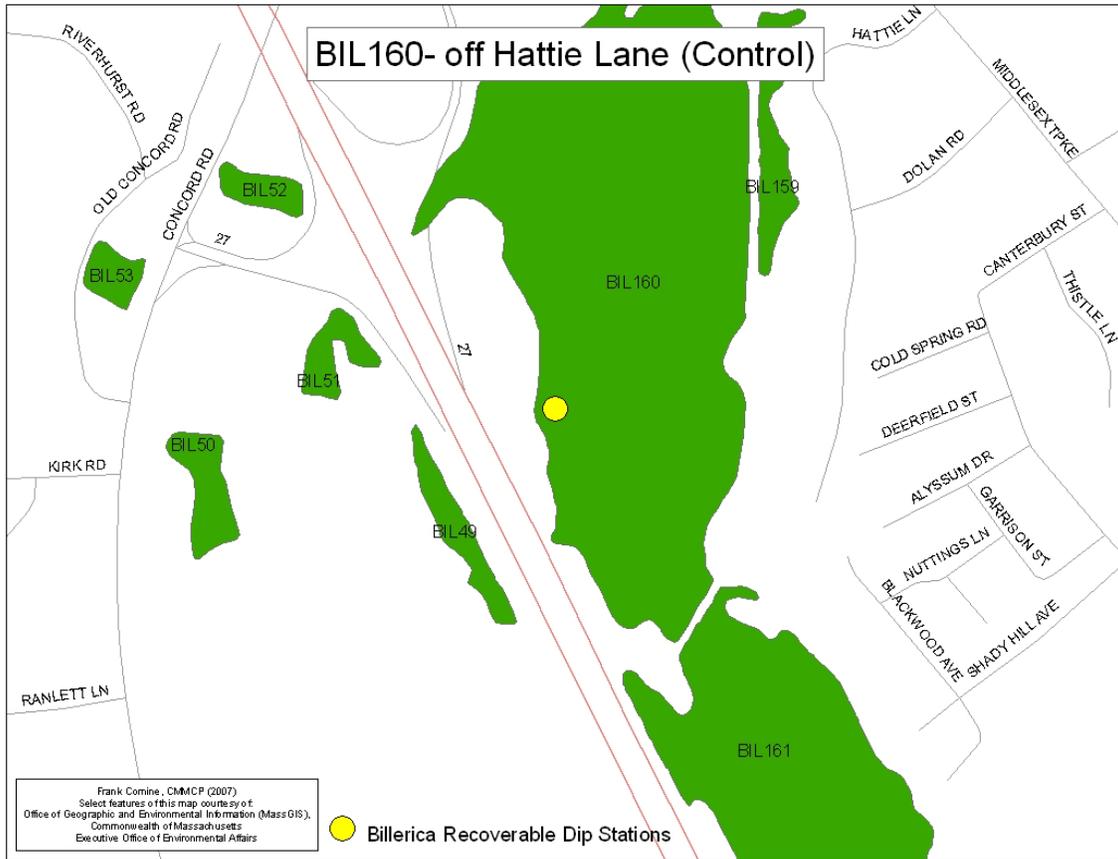
Town of Billerica Recoverable Dip Stations Data



Similar to BIL108, this site had a 100% reduction in mosquito larvae although this site reached it only 24 hours after application. As with the other two Billerica test sites, Bti was visibly present.

Dip Site #	18-Apr	23-Apr	24-Apr	25-Apr
1	0	2	Application	0
2	0	5		0
3	0	1		0
4	0	2		0
5	0	5		0
6	0	3		0
7	0	5		0
8	0	8		0
9	0	2		0
10	0	2		0
Total:	0	35		0

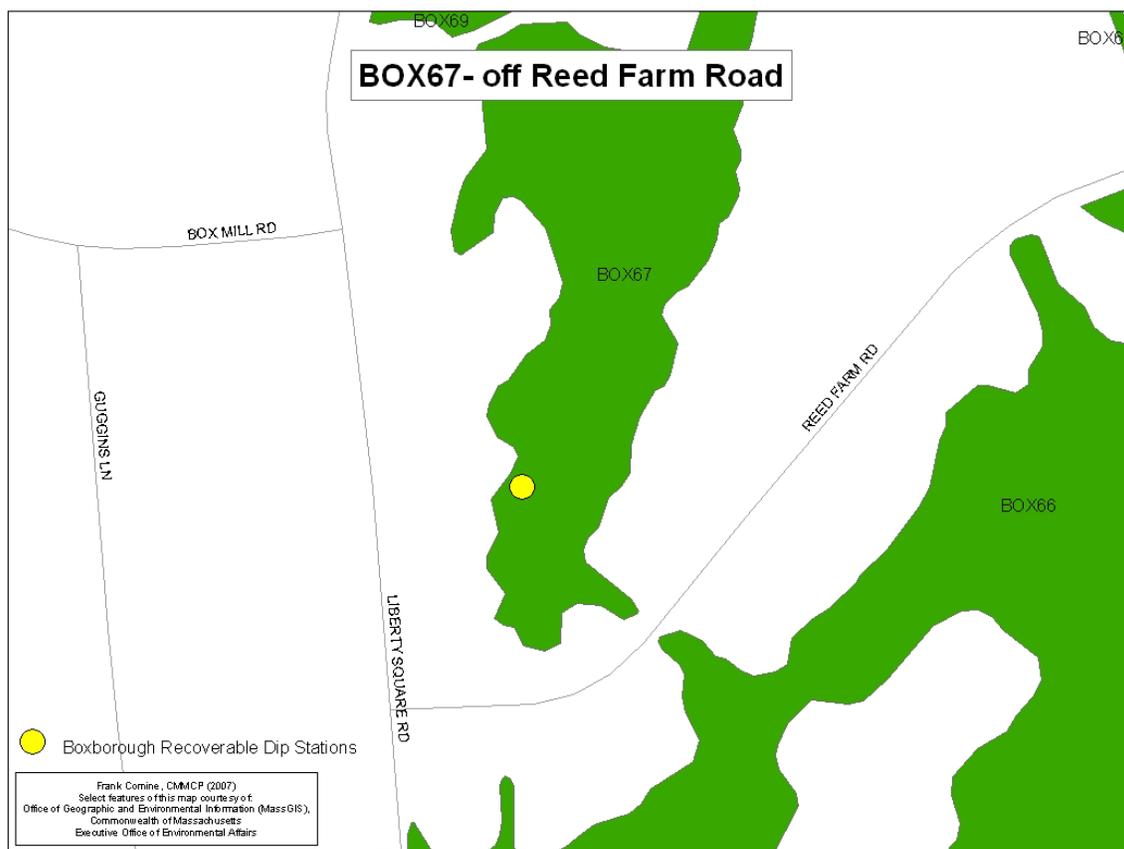
Town of Billerica Recoverable Dip Stations Data



This RDS was setup as the designated control site for the town. This wetland was not treated in the aerial application, but had 42.11% fewer mosquito larvae post application. There were no observed dead larvae in the samples, as is the case in many of the treated sites. Because of this absence, one could speculate that the reduction may be due in part to larval hatching.

Dip Site #	18-Apr	23-Apr	24-Apr	25-Apr
1	0	1	Application	0
2	0	3		1
3	0	4		0
4	0	1		3
5	0	2		0
6	0	1		4
7	0	1		2
8	0	2		0
9	0	1		1
10	0	3		0
Total:	0	19		11

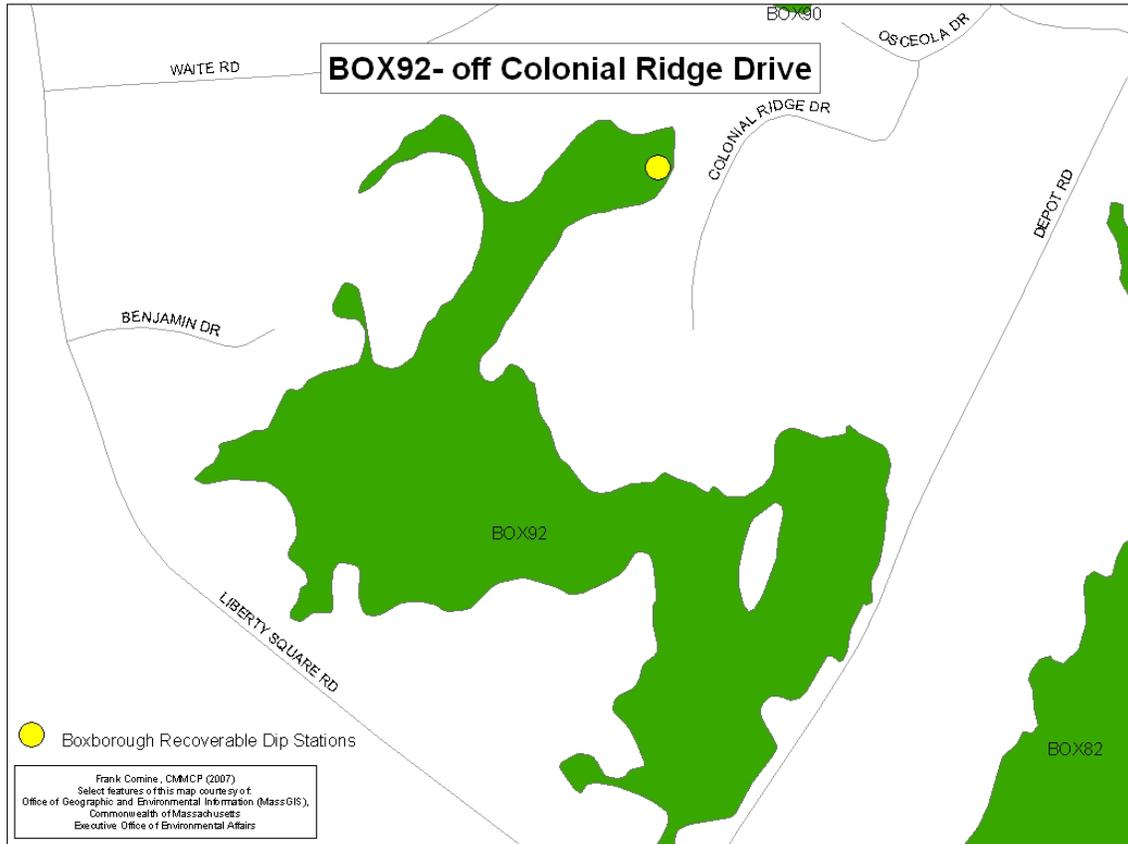
Town of Boxborough Recoverable Dip Stations Data



This RDS in Boxborough displayed a 75.56% reduction in the number of mosquito larvae post-application. Bti was not found directly in all the dip sites, possibly due to the applicators buffer zone around the proximity of residential areas. Despite the lack of Bti granules at every dip site, the overall reduction was very good at this site.

Dip Site #	18-Apr	23-Apr	24-Apr	25-Apr	26-Apr
1	1	6	Application	1	0
2	1	3		2	1
3	1	7		0	0
4	1	3		3	4
5	1	4		2	3
6	1	4		0	0
7	1	10		1	1
8	1	3		5	0
9	1	2		0	0
10	3	3		1	2
Total:	12	45		15	11

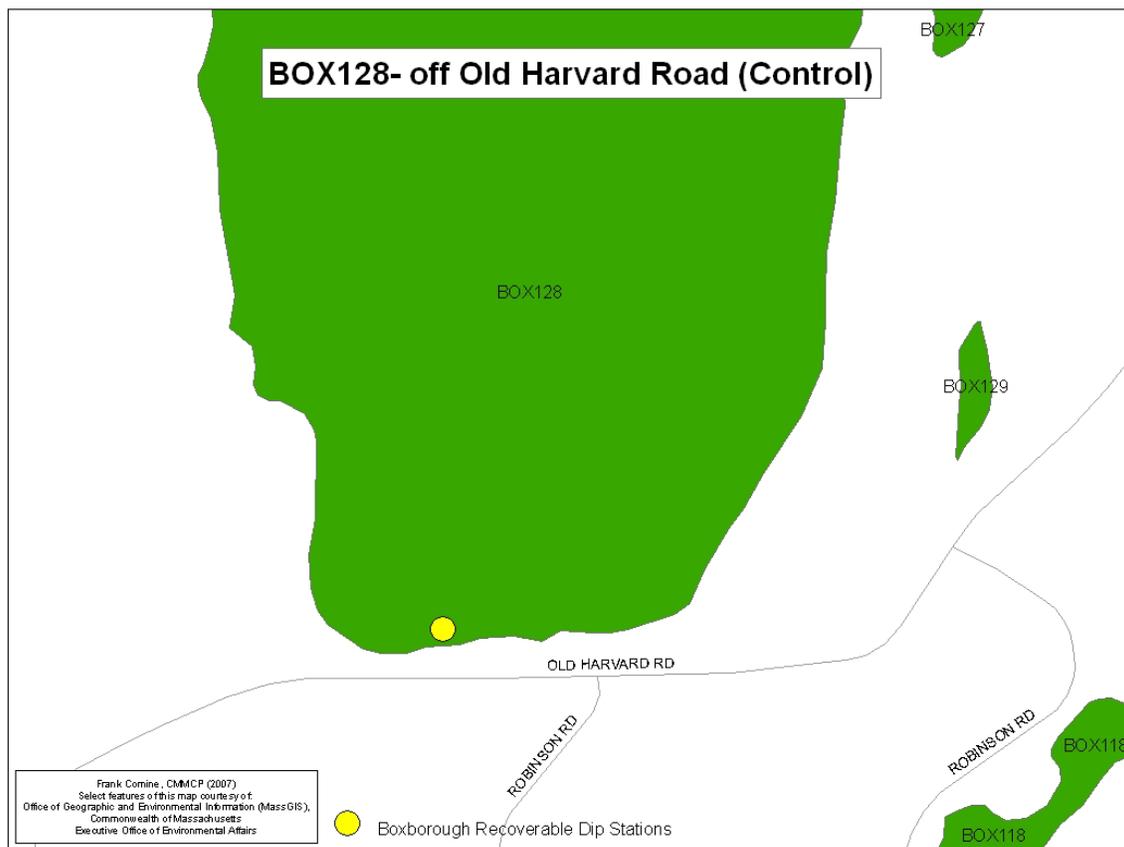
Town of Boxborough Recoverable Dip Stations Data



This RDS had an overall reduction in mosquito larvae of 30.77%, although there were no Bti granules found at the dip sites. The shape of this wetland body may have contributed to the apparent absence of product. When technicians sampled other areas of BOX92 in response to the lack of granules at the RDS, Bti was found and no live larvae were observed.

Dip Site #	20-Apr	23-Apr	24-Apr	25-Apr	26-Apr
1	5	4	Application	5	2
2	5	12		4	3
3	2	7		3	4
4	2	11		5	4
5	3	8		4	4
6	4	10		8	2
7	4	7		4	8
8	4	14		10	30
9	4	10		10	3
10	3	8		8	3
Total:	36	91		61	63

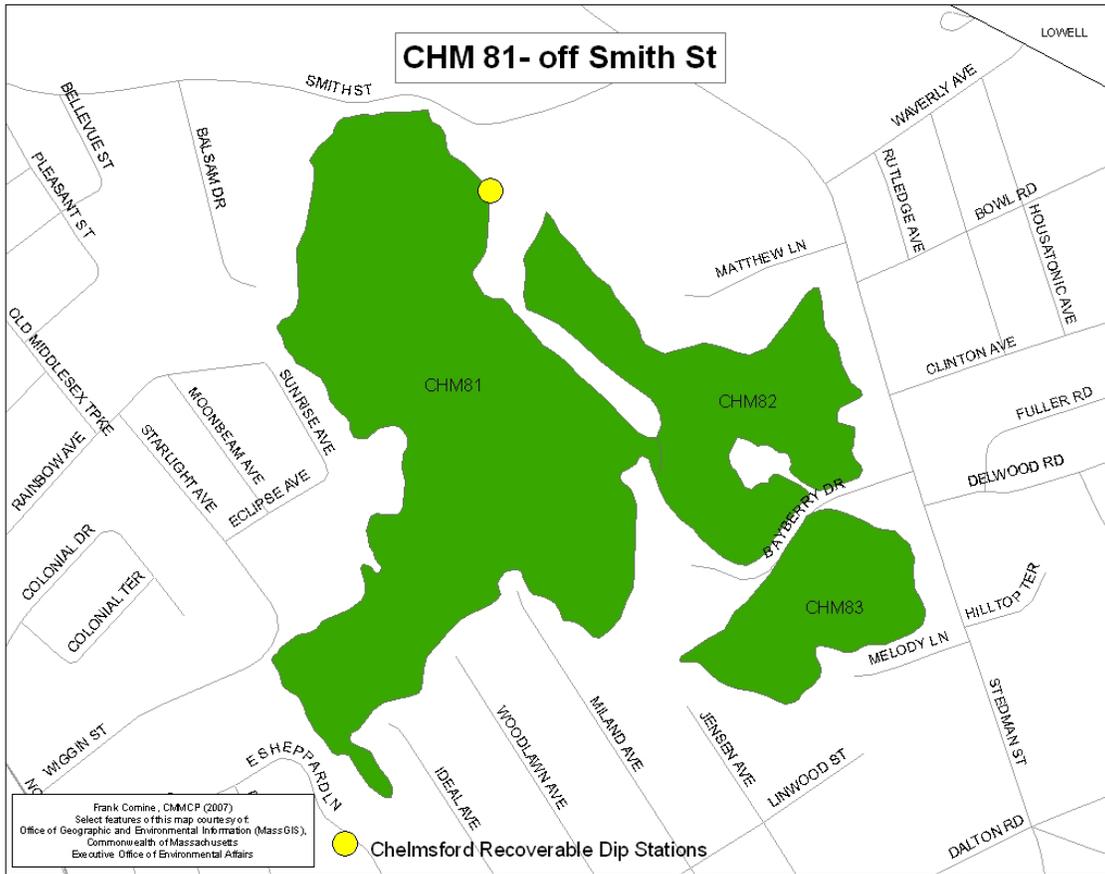
Town of Boxborough Recoverable Dip Stations Data



This control site for Boxborough showed an increase of 33.33% from before the application to 48 hours after. These results are what may be expected from an untreated area.

Dip Site #	23-Apr	24-Apr	25-Apr	26-Apr
1	2	Application	2	2
2	3		2	2
3	2		4	2
4	5		3	4
5	4		5	6
6	2		3	3
7	4		5	3
8	3		3	4
9	2		5	6
10	3		5	8
Total:	30			37

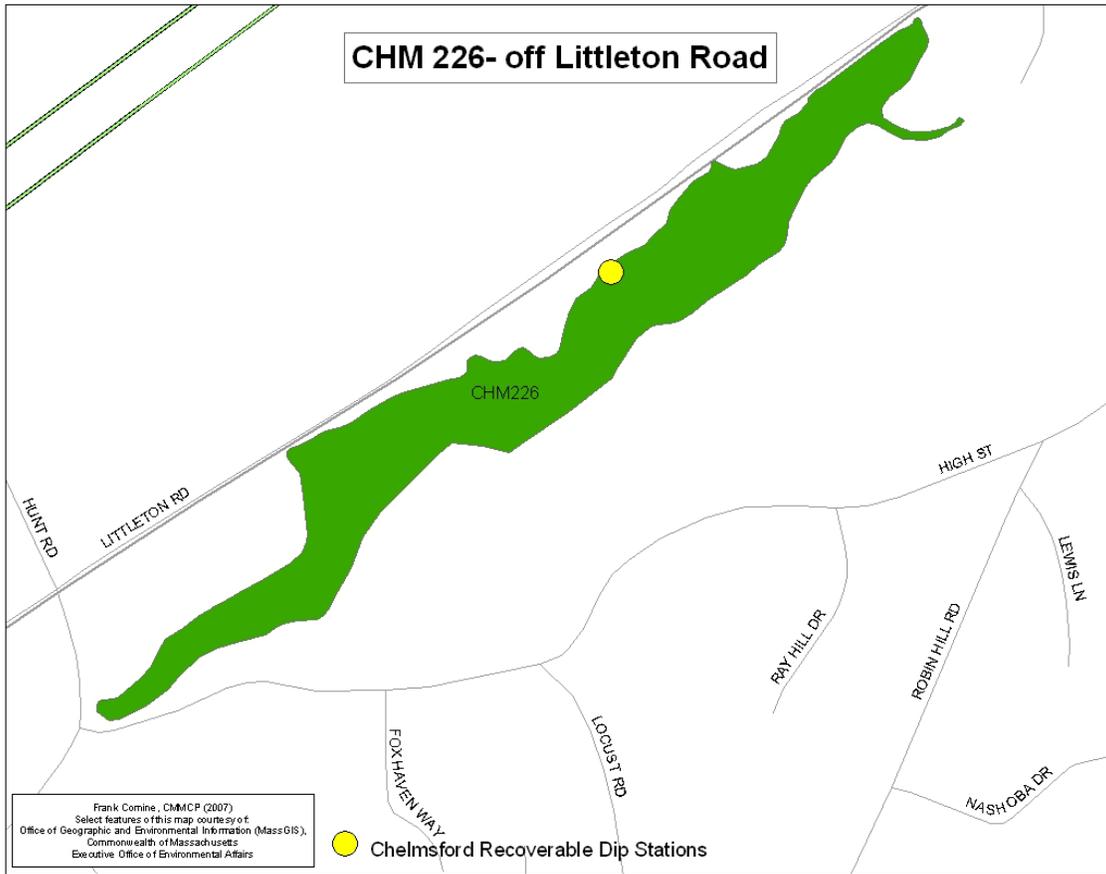
Town of Chelmsford Recoverable Dip Stations Data



This RDS in Chelmsford had a 30.00% reduction in mosquito larvae, despite not having Bti present at the actual dip stations. Field technicians noticed granules in the area but not directly in the RDS. In the rest of the area where Bti was present, the reduction can be presumed to have been even greater.

Dip Site #	18-Apr	23-Apr	24-Apr	25-Apr
1	1	Application	0	2
2	3	↓	0	1
3	1		1	1
4	2		2	1
5	2		1	1
6	2		3	5
7	1		0	1
8	3		2	0
9	1		2	1
10	4		3	1
Total:	20			14

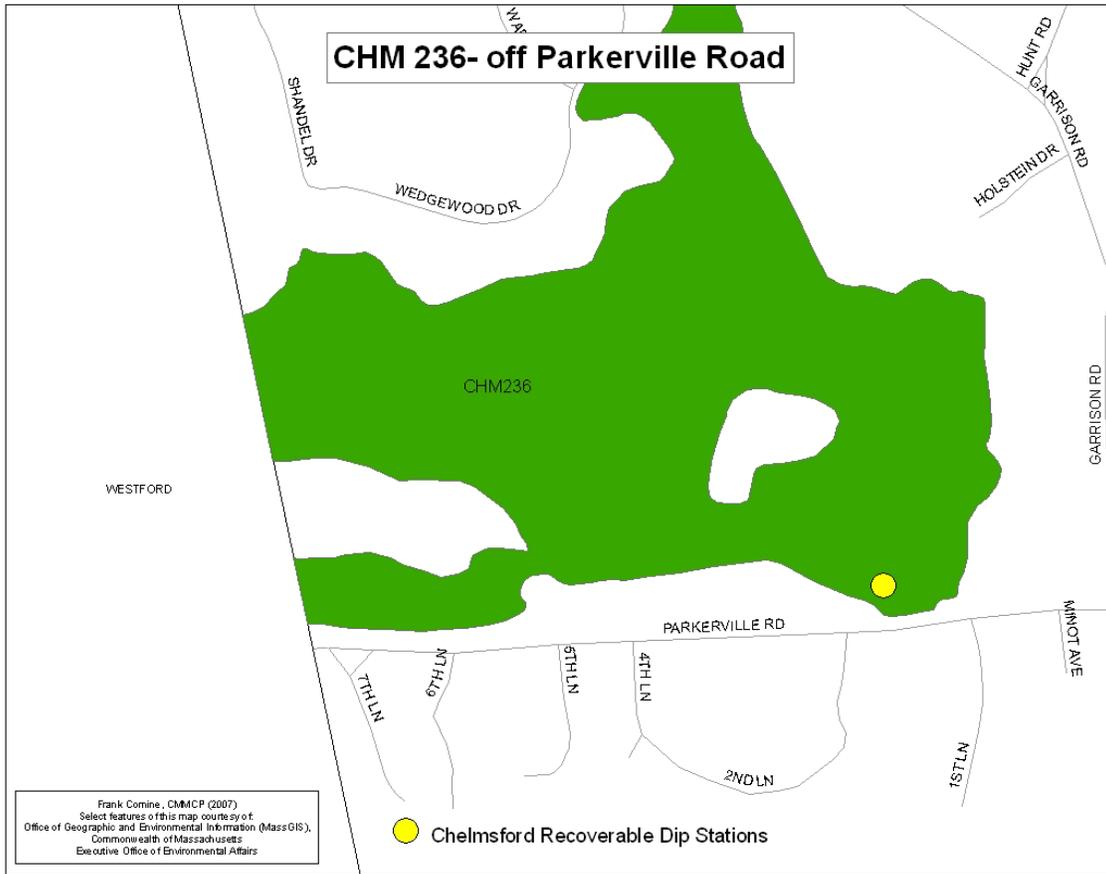
Town of Chelmsford Recoverable Dip Stations Data



The observed reduction in mosquito larvae at this RDS was much lower than some of the others. This is not an indication of the effectiveness of the Bti, because technicians did not notice Bti at the RDS. The area right at the RDS could have been excluded due to the judgment of the pilot doing the application.

Dip Site #	18-Apr	23-Apr	24-Apr	25-Apr
1	7	Application	6	6
2	3		6	5
3	1		2	4
4	7		5	5
5	3		0	4
6	3		2	4
7	10		4	6
8	5		4	5
9	5		3	2
10	2		3	2
Total:	46			35

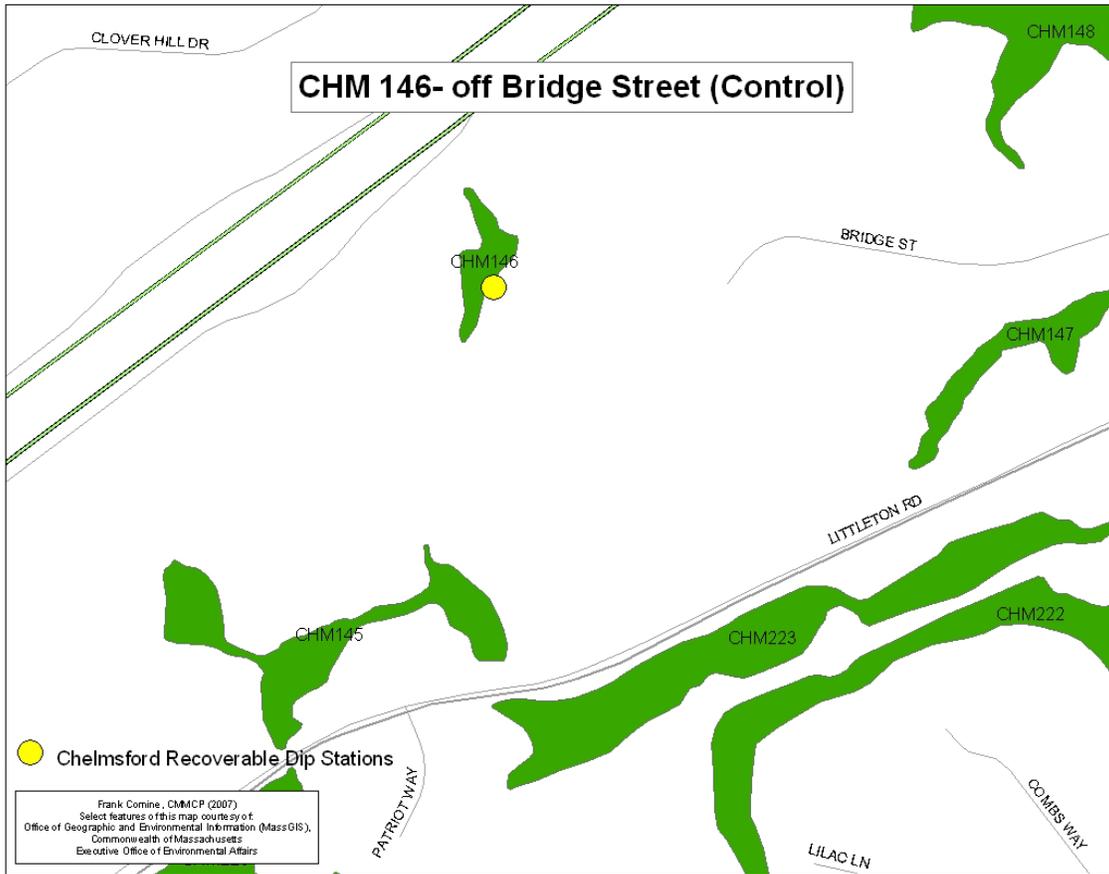
**Town of Chelmsford
Recoverable Dip Stations Data**



This RDS was very similar to CHM226, where there was no Bti present in the dip station area. The increase in mosquito larvae reflects the lack of Bti granules.

Dip Site #	18-Apr	23-Apr	24-Apr	25-Apr
1	3	Application	2	4
2	1		2	3
3	3		4	3
4	1		5	2
5	4		3	4
6	1		4	3
7	5		5	5
8	2		4	3
9	4		3	4
10	4		3	5
Total:	28		35	36

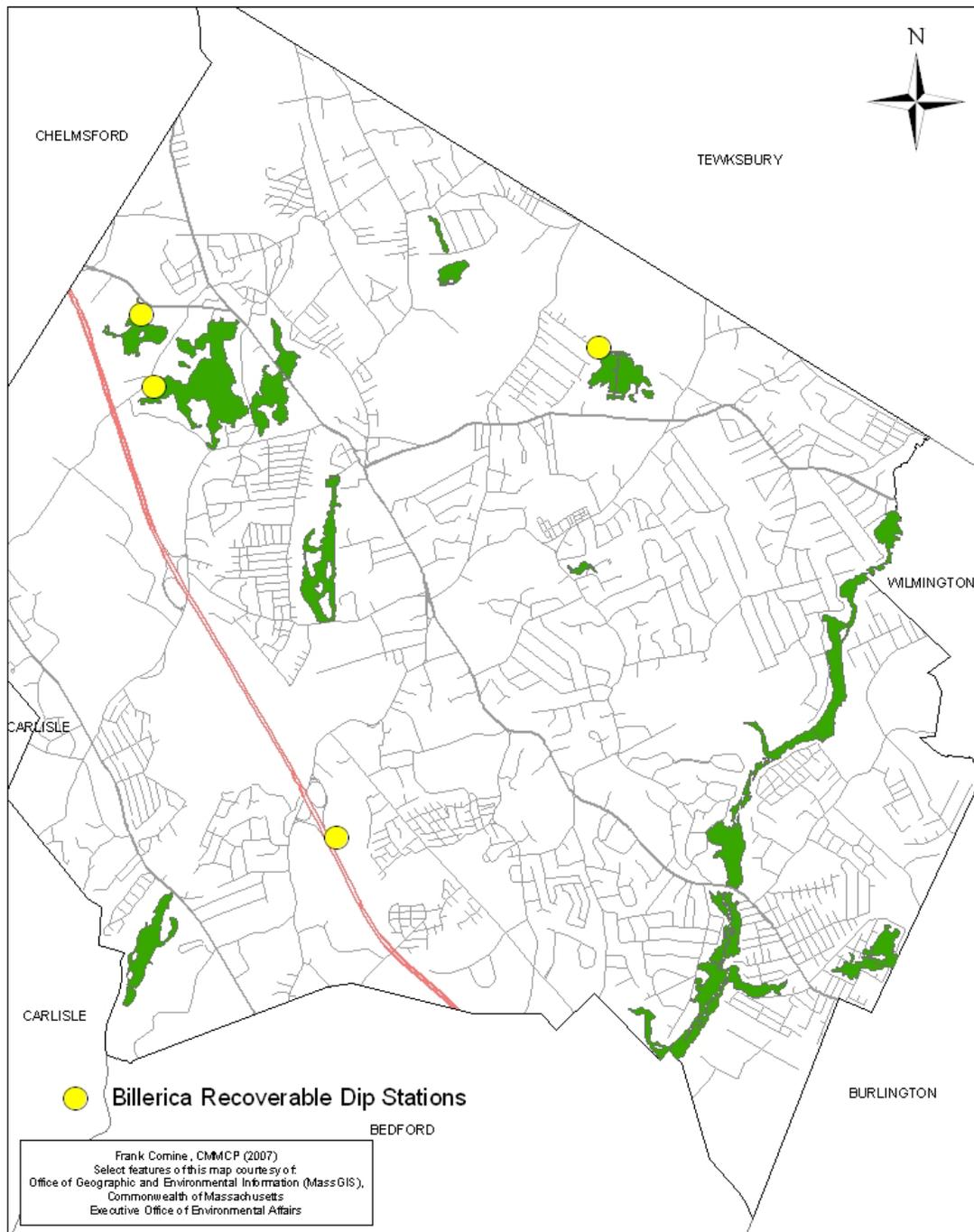
Town of Chelmsford Recoverable Dip Stations Data



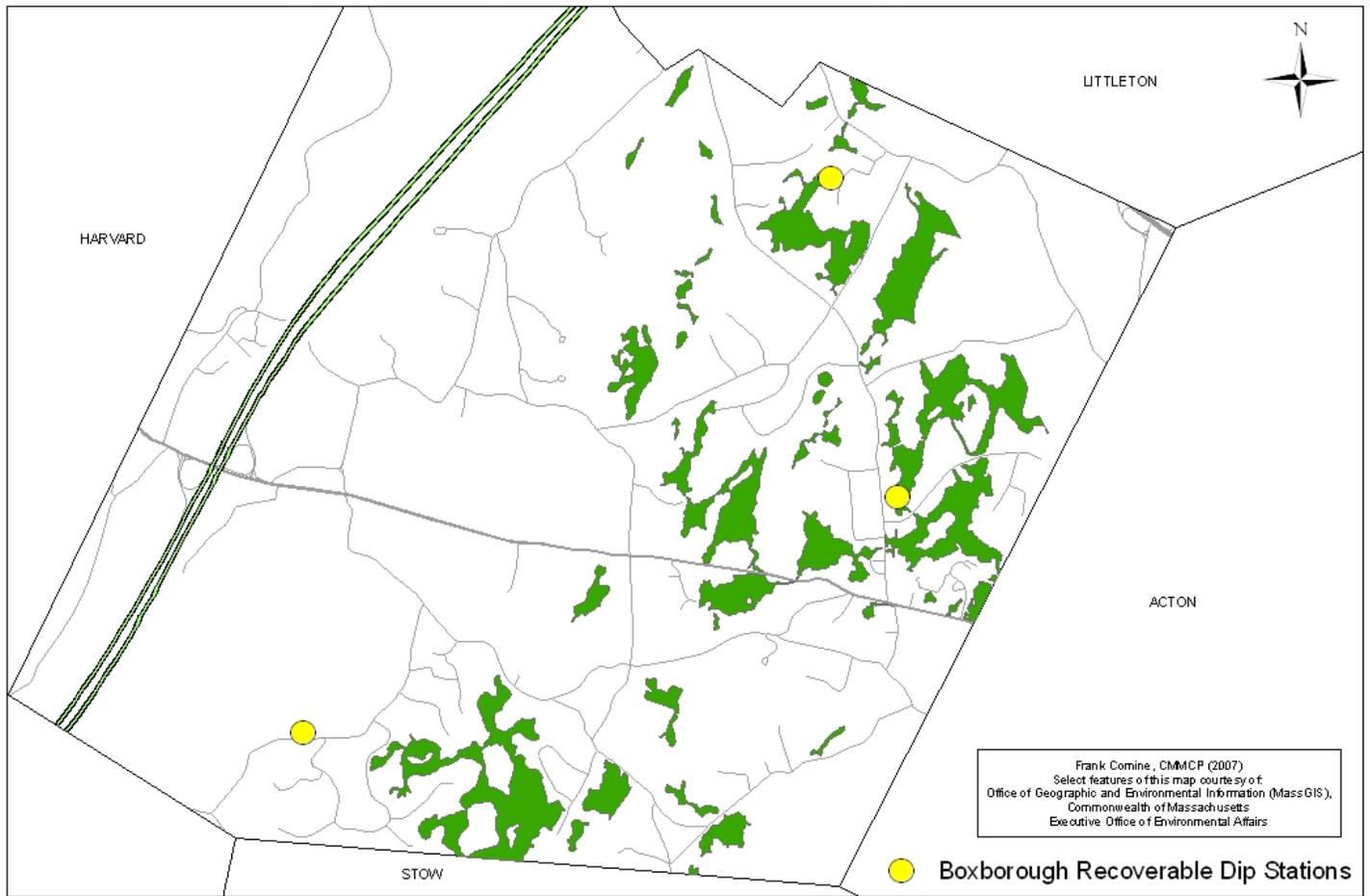
This was the designated control RDS for the town of Chelmsford. This site was not treated with Bti and the results greatly reflected that. The mosquito larvae sampled almost doubled from pre application with a 96.43% increase.

Dip Site #	18-Apr	23-Apr	24-Apr	25-Apr
1	2	Application	4	2
2	1		3	4
3	6		4	8
4	3		4	5
5	1		7	3
6	2		6	5
7	5		7	6
8	4		11	7
9	1		3	7
10	3		4	8
Total:	28		53	55

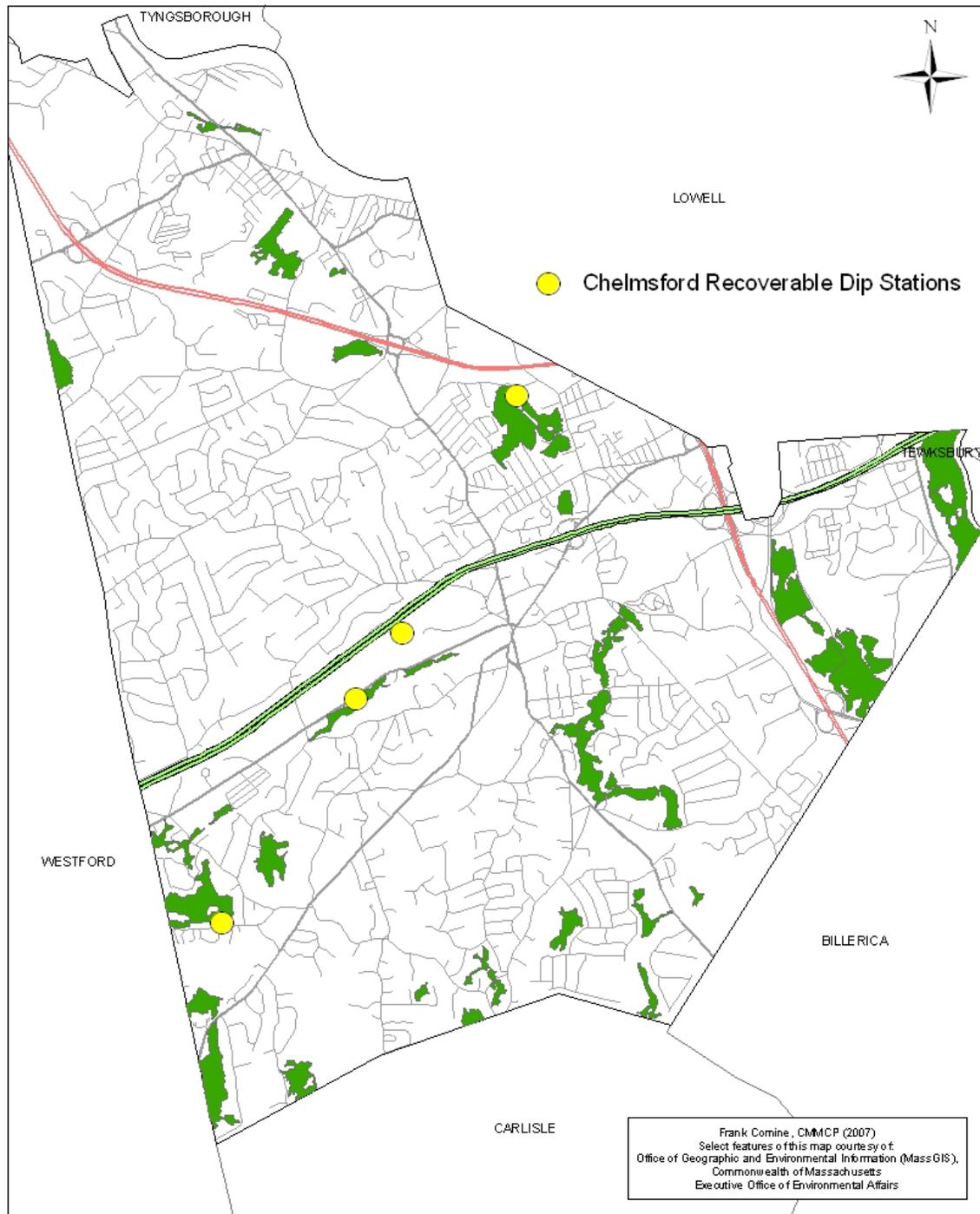
Billerica Wetlands Treated in 2007 Spring Aerial Larvicide



Boxborough Wetlands Treated in 2007 Spring Aerial Larvicide



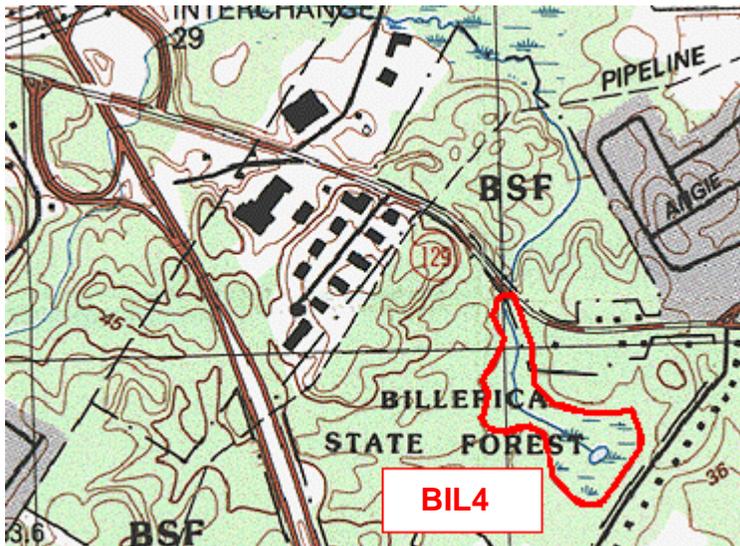
Chelmsford Wetlands Treated in 2007 Spring Aerial Larvicide



**BILLERICA AERIAL APPLICATION FOR THE CONTROL OF
SPRING BROOD MOSQUITO LARVAE
APRIL 2002**

In 2001 the Town of Billerica contacted the Central Massachusetts Mosquito Control Project and began a program of aerial applications of *Bacillus thuringiensis israelensis* (Bti) in large-scale area wetlands to reduce the emergence of spring brood mosquitoes, most notably *Ochlerotatus abserratus*, *Oc. excrucians* and *Oc. canadensis*. This program continued in 2002, and the contractor selected this year was North Fork Helicopters based in Cutchogue, NY after a competitive bid process.

The following summary will show the areas treated by helicopter in Billerica, and the surveillance gathered pre- and post application. Data was collected at the same site pre- and post, and larval counts are noted in the narration below.



BIL4 - off Chelmsford Road

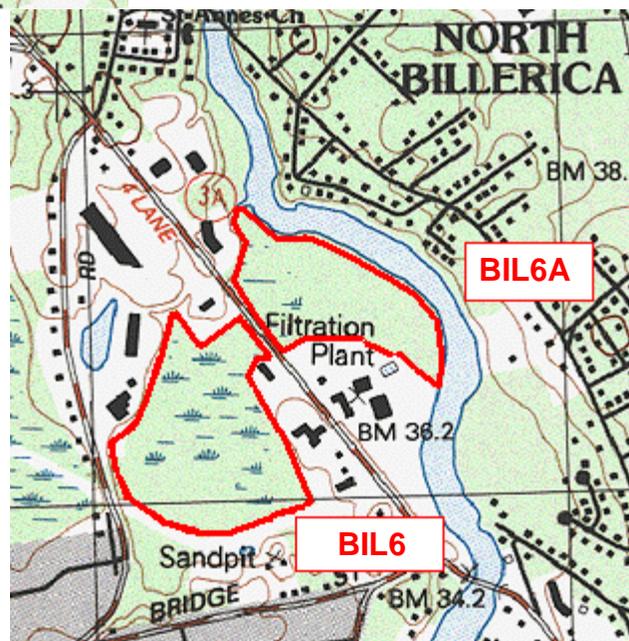
Pre-application data in 2 dip stations showed 2nd and 3rd instar larvae averaging 3 per dip at both stations. Post application surveillance did not show any active larvae in this area.

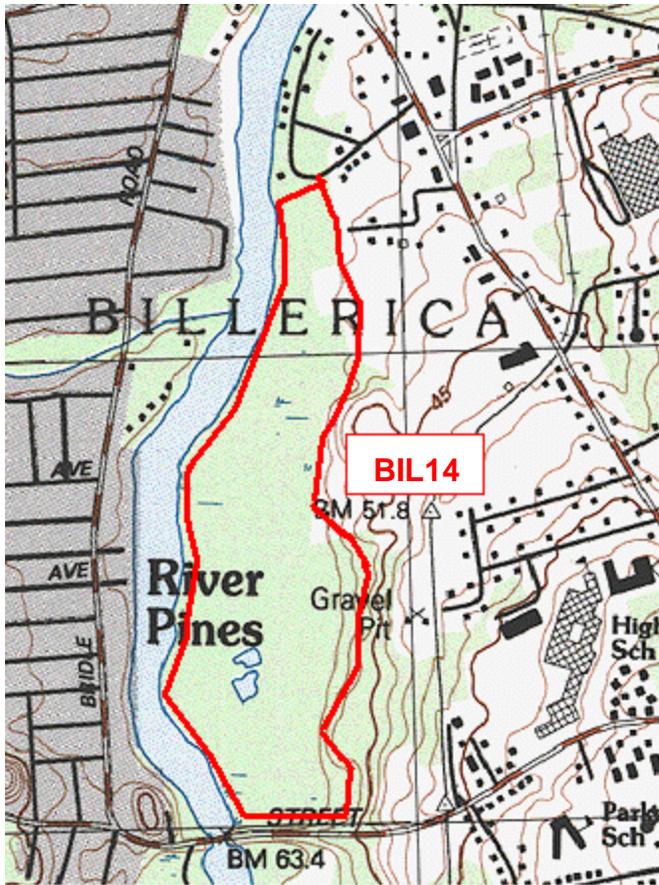
BIL4 - 5 acres

BIL6 & 6A - off Boston Road

Pre-application data in 2 dip stations showed 1st, 2nd and 3rd instar larvae averaging 2 per dip at both stations. Post application surveillance did not show any active larvae in these areas, but a few mosquito pupae were noted, indication the larvae were advancing through their life cycle at a rapid pace.

BIL6 - 30 acres
BIL6a - 11 acres





BIL14 - off Simmons Lane & Todd Lane

Pre-application data in 2 dip stations off Simmons Lane showed 3rd and 4th instar larvae, with 20 per dip at one site, and 4 per dip (average) at the other. Post application dips showed only scattered pupae and a few 4th instar larvae remaining in these areas.

Dip stations off Todd Lane showed 2nd and 3rd instar larvae, pre-application, averaging 3 and 8 per site. Post application showed no breeding at 1 station, and only one 4th instar larvae at the other.

BIL14 - 78 acres

BIL32 - off Shawsheen Road, Seminole Road & Sheridan Street

This area is a large floodplain of the Shawsheen River in the Pinehurst section of town. 6 dip stations were monitored for this application.

Seminole Rd. #1:

pre- 4/dip 2nd & 3rd

post - no larvae found in area

Shawsheen Rd. #1,2&3:

pre - 20/dip, 2nd & 3rd (sites 1&2)

15/dip 2nd & 3rd (site 3)

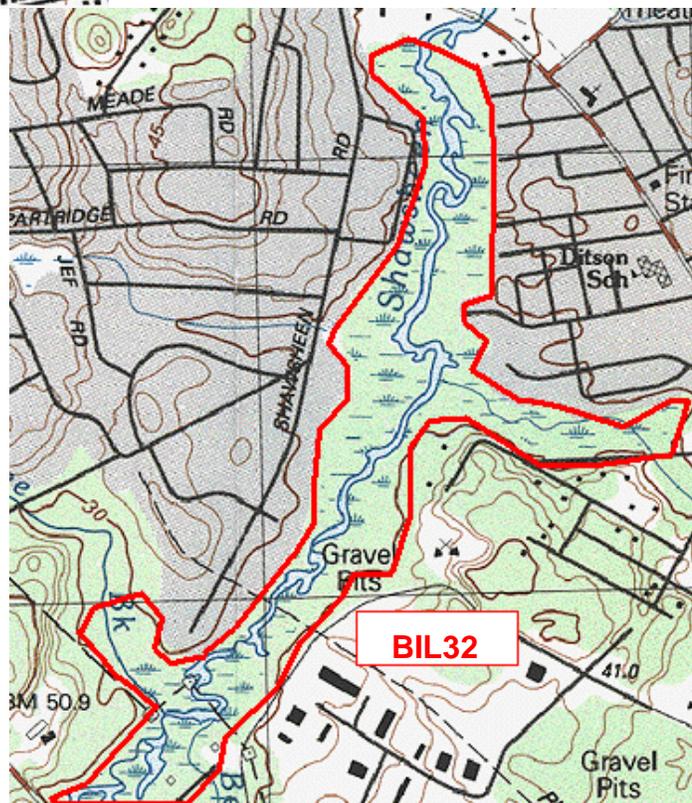
post - no larvae, 6/dip 2nd & 3rd, no larvae

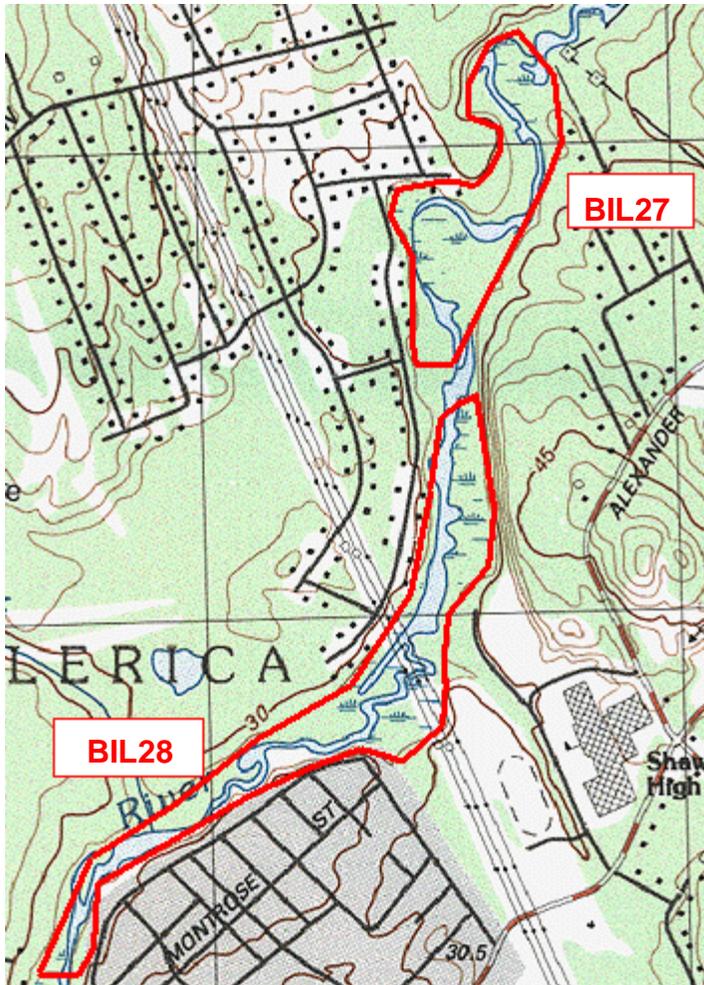
Sheridan Rd. #1 & 2:

pre - 4/dip 2nd & 3rd, 16/dip 2nd & 3rd

post - 3/dip 2nd, no larvae

BIL32 - 85 acres





BIL27 & 28 - off Sachem Street & Islington Road

Pre-application data off Sachem Street shows 3/dip average, 1st instar. Post treatment data shows no mosquito breeding found in this area.

Data for the Islington Road dip station shows 18/dip, 2nd instar, pre-application. Post application follow up data reveals 3rd instar larvae in the area, at an average of 2 per dip.

BIL27 - 105 acres

BIL28 - 70 acres

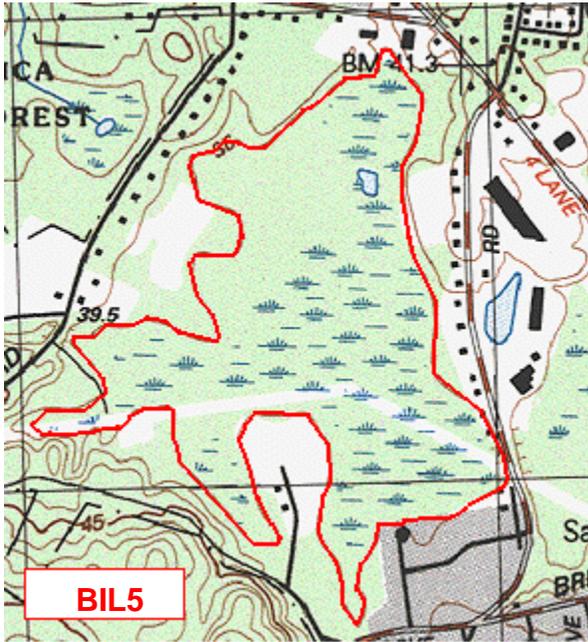
CONCLUSION

Data collection at the dip stations shows this application to be a success. Most areas did not show active larvae after the application. Reduced dip counts in some areas may be due to the fact that the pilot will have buffer zones around roads, houses, etc, and also due to the fact that Bti is not as effective on later (4th) instar larvae. Other areas in Billerica were also treated, and dipping was done only to confirm the presence of larvae - success in these areas would be expected to equal the areas listed above. Maps of the areas are on the following pages in Appendix A.

These sites were chosen due to the proximity to residential areas, adult collections over the past few years, and service calls to this office. Total acreage for this application was on or about 600 acres. Acreage listed is approximate, and does not reflect the drought we have experienced in 2002. Field inspections have shown sites to be smaller this year than in past years.

We look forward to continuing this application in the future, and expanding this program in neighboring communities to the benefit of all residents.

Appendix A



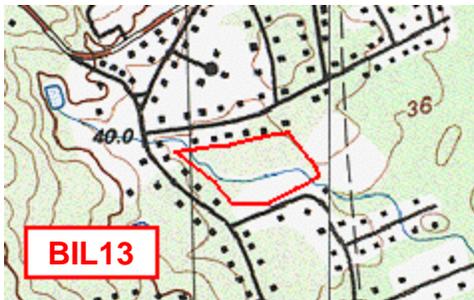
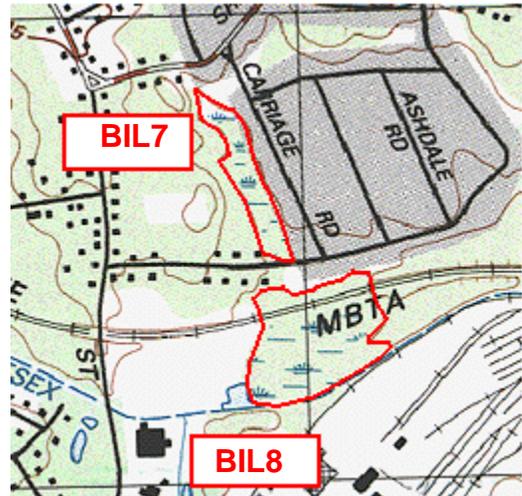
BIL5 - between Rangeway Road & Treble Cove Road

BIL5 - 103 acres

BIL7 & BIL8 - Carriage Road area

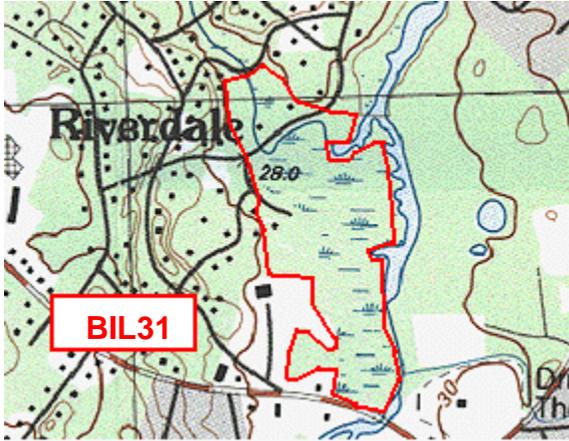
BIL7 - 10 acres

BIL8 - 10 acres



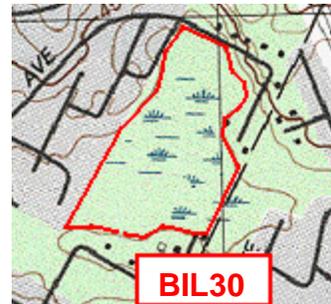
BIL13 - off Allen Road

BIL13 - 23 acres



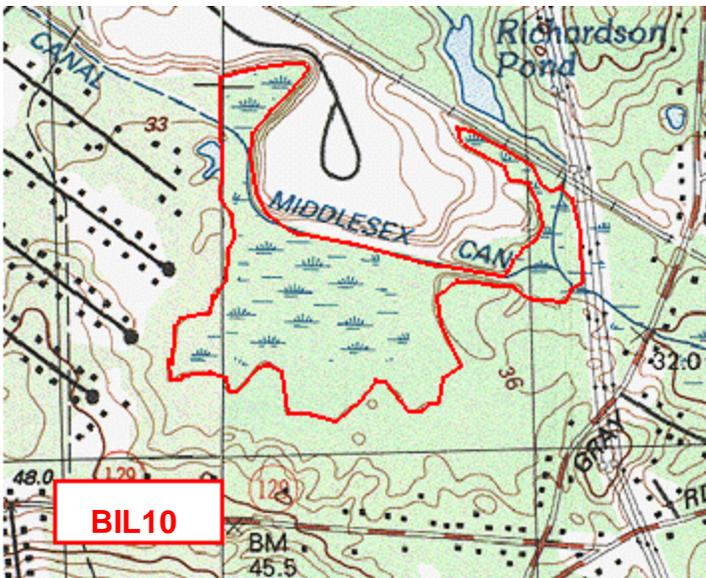
BIL31 - Shawsheen River floodplain,
Riverdale section

BIL31 - 42 acres



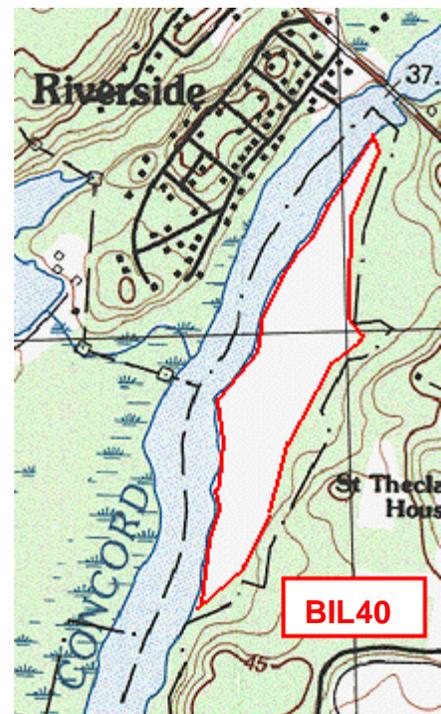
BIL30 - off Pinedale Avenue

BIL30 - 35 acres



BIL10 - off Pond Street

BIL10 - 67 acres



BIL40 - Concord River floodplain,
Riverside section

BIL40 - 45 acres

EFFICACY OF THE CENTRAL MASS. MOSQUITO CONTROL ADULTICIDE PROTOCOL – 2007

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ABSTRACT

During the summer of 2007, the Central Mass. Mosquito Control Project (CMMCP) conducted field trials for the efficacy of their adulticide product and procedure. By observing natural mosquito populations during seven week-long trial sets at application areas and control sites, it was determined that the current protocol results in a 2-3days of control before returning to pre-application levels. These results are believed to be due to the low residual nature of the product used for control and a rapid reinfestation by neighboring mosquito populations. Recent emergence of new mosquitoes is also a possibility although more unlikely than the previous scenarios. Despite these findings, the application rates are considered sufficient for non-vector control situations at this time, but it is proposed that changes in the protocol involving insecticide rates and target areas could increase the efficacy of this program during vector control situations.

INTRODUCTION

At the forefront of any vector control operation should be the efficacy of their practices. As one of several tools in any mosquito control project's integrated pest management (IPM) plan, adulticide applications are no different (Crockett 2002). Like many mosquito control projects, CMMCP uses ULV machines, the basis of which is to use the smallest effective amount of insecticide product (Mount 1998). Currently CMMCP uses ANVIL® 10+10 (Clarke Mosquito Control Products, Inc., Roselle, IL) (EPA Reg. No. 1021-1688-8329), a synthetic pyrethroid composed of 10% SUMITHRIN® (Sumitomo Chemical Company, Ltd., Osaka, Japan)(d-phenothrin) and 10% piperonyl butoxide (PBO)(Center for Disease Control and Prevention 2002; PHEREC 2001).

During the 2007 season, CMMCP applied ANVIL® 10+10 at a flow rate of 1.9oz at 15mph, which results in the application of .0012lbs of active ingredient per acre. This is the lowest active ingredient rate suggested on the product label (CMMCP 2007). In order to maintain proper application equipment standards, CMMCP conducts a ULV Sprayer Maintenance and Calibration Program as part of the Standard Operating Procedures Manual[MSOffice1]. This ongoing program involves monthly droplet size tests and flow rate calibration, and well as other general maintenance actions for the ULV machines such as spray head flushing and ultrasonic cleaning. In striving to monitor the

strength of their protocols, CMMCP conducted an efficacy review of the 2007 adulticide program.

Efficacy trials of the past tend to use caged mosquitoes over natural populations because of their rapid, economical, and more standardized results. Despite these differences, studies have shown that the percent reduction of caged mosquitoes is the same as the reduction of the natural populations (Mount 1998). Any poor results of a ULV application could be caused by an ineffective insecticide dosage, mosquito resistance to that insecticide, unfavorable weather conditions, reduced target coverage due to dense vegetation, or quick repopulation of the area (Curtis 1996; Efirid 1991; Mount 1998).

Mosquito insecticide resistance has become an issue in recent years. Routine resistance surveillance is needed to ensure that resistance is not impacting the efficacy of ULV applications (Brogdon 1998). CMMCP has started routine resistance surveillance and the results indicate that resistance to the current insecticide does not seem to be an issue with the mosquito populations in the CMMCP service area (Cornine 2007).

Weather conditions can also have a great impact on the effectiveness of an ULV application. Important factors include wind direction and velocity, temperature and temperature gradients (Mount 1998). Wind direction and velocity are important in that they are needed to create the

drift for the adulticide across the target area. Velocities of 1-7mph are ideal with gusts of no more than 11mph. Ambient temperatures are important to the efficacy of ULV applications in that they influence mosquito activity as well as possibly compromising the effectiveness of the insecticide itself.

Another temperature factor is the temperature gradients in the atmosphere which can impact the inversion of the application product into the elevated levels of tree canopies (Mount 1998). This can be important for vector control efforts due to the fact that certain potential vector species of Eastern Equine Encephalitis (EEE) and West Nile virus (WNV) tend to congregate in the canopies, namely *Culiseta melanura* and *Culex pipiens* (Anderson 2004). These meteorological factors all play a part in the mosquito control efficacy of ULV applications. With these factors in mind, it is generally more advantageous to perform applications in the evenings due to mosquito activity and weather conditions (Mount 1998).

Vegetated areas can also be a factor in the efficacy of a ULV application (Mount 1998). It has been noted that a higher dosage rate may have to be used to obtain the same control level for areas where there is heavy vegetation compared to open spaces (Curtis 1996). This is due in part to the idea that the size and amount of droplets at the regular dosage rates may be unable to physically reach the adult mosquitoes in the vegetative cover. In fact, it has been reported that for a ULV application in vegetative areas compared to open spaces, the effectiveness of the normal dosage rates can be reduced by over 4 times (Curtis 1996; Mount 1998). With cost and environmental impact in mind, mosquito control personnel tend to use insecticide at the lowest suggested rates, but in situations where there is dense cover for adult mosquitoes these rates may be less effective, resulting in the need for additional applications, increasing costs and impact overall (Curtis 1996). Dense housing, fencing and other wall structures can also have similar impacts on the effectiveness of ULV ground applications as vegetation (Mount 1998).

A major problem with efficacy studies using natural populations is that mosquitoes in neighboring areas may repopulate the area after the application (Ebird 1991; Mount 1998). In areas where the street layout allows a large coverage area, ULV applications can provide increased

control over smaller targeted areas because of the possibility of reinfestation. In these small target areas situations, additional and more frequent applications may have to be made for adequate control (Mount 1998).

Keeping all of these factors in mind, CMMCP personnel conducted efficacy trials of the 2007 adulticide program to help determine what limiting factors may be present and if any procedural changes are consequently needed.

METHODS

To test the efficacy of the CMMCP standard adulticide procedure, two sites were chosen per week for seven weeks with mosquito collections made for both sites every weekday evening. One of these sites was selected to be sprayed in the standard manner while the other is not sprayed and is used as the control site. Collections were made for each site Monday through Friday with the experimental site being adulticided on Wednesday evenings. Test sites were chosen from service requests received, while the control sites were selected from nearby areas that the residents were informed that their property would be treated as an exclusion area for that week. Of the seven weeks of trials, four were at residential sites, two at recreational locations, and one was at a transfer station.

Using model 512 CDC miniature light traps baited with CO₂ (500ml/min), along with model 1512 collection bottle rotators (John W. Hock Co., Gainesville, FL), we were able to make the nightly collections that could be identified as to what time period the specimens were captured. There were seven collection time periods used for this project, programmed for 2 hour intervals from 5pm to 7am in order to observe the peak mosquito activity times as well as to have greater detail on the impact of the application.

Specimens were counted by site and collection period, with the weekly data for each site plotted. After plotting the data for both sites during the week, the graphs could be compared to help determine to what affect the adulticide application had on the local mosquito population. Then we compare for both sites, the two days before the application, the day of the application, and also the two days after the application. On the evening of applications, field technicians noted the time, temperature and wind direction prior to beginning.

EFFICACY TRIAL #1

Looking at each week's corresponding site collections, we can observe a couple trends. For MMWR 23 collections, the pre-application evening for the application site was more than double of the night of the application. This observation was different from the control site, which showed an increase during the application evening. Despite this decrease, levels for the two post-application evenings were much higher for both sites. A rain event during the first evening looks to have negatively impacted the collections from both sites, but especially from the application site (Figures 1-4).

Figure 1: MMWR 23 Application Site Collections (6/4-6/8)

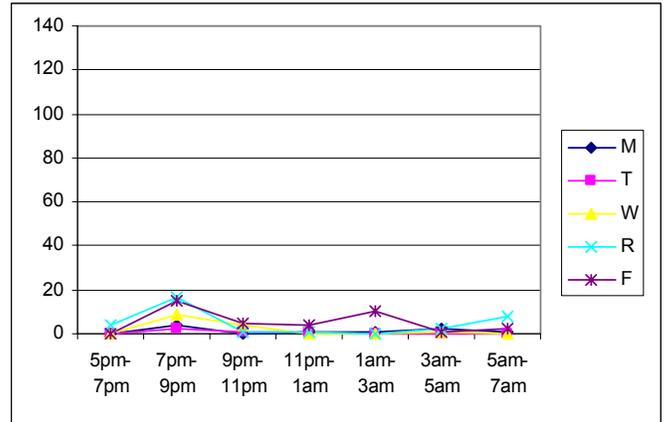
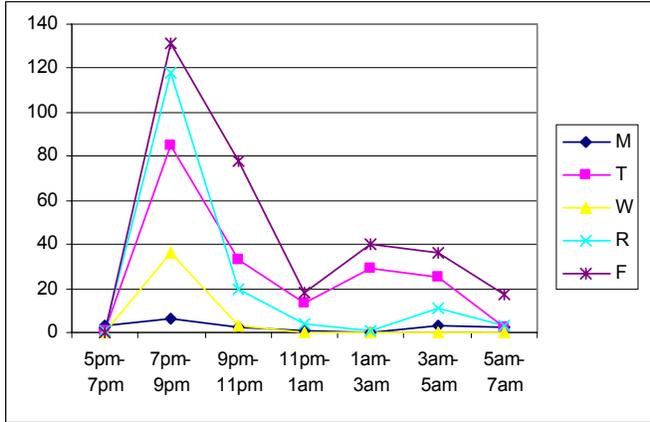


Figure 2: MMWR 23 Control Site Collections (6/4-6/8)

Figure 3: MMWR 23 Application Site Nightly Collection Totals With Midnight Temperatures (°F) (6/4-6/8)

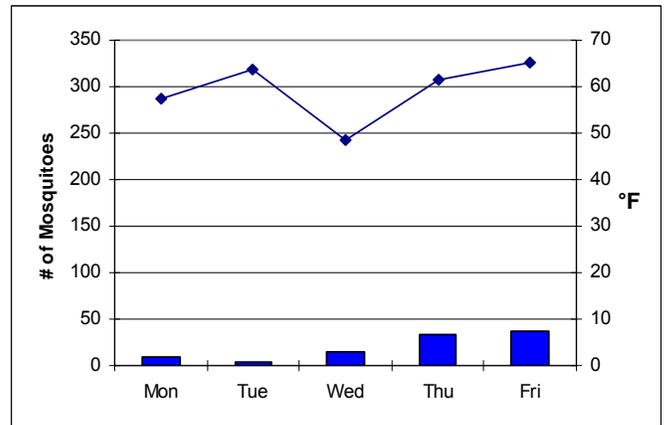
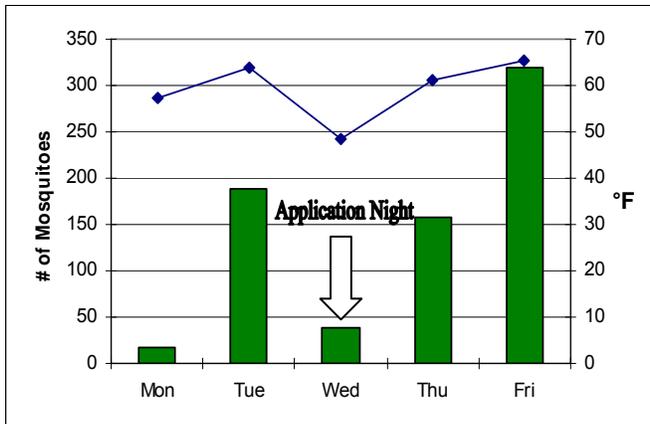


Figure 4: MMWR 23 Control Site Nightly Collection Totals With Midnight Temperatures (°F) (6/4-6/8)

EFFICACY TRIAL #2

The results from MMWR 24 were affected by evening temperatures on the application night that were much cooler than those for the rest of the week. This midweek dip in temperatures may have altered the results of the application. The post-application collections were relatively lower than pre-application, although the results were shown for both the control and application sites (Figures 5-8).

Figure 5: MMWR 24 Application Site Collections (6/11-6/15)

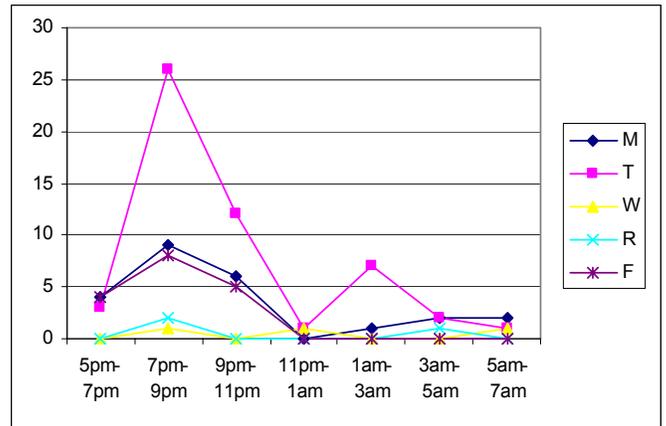
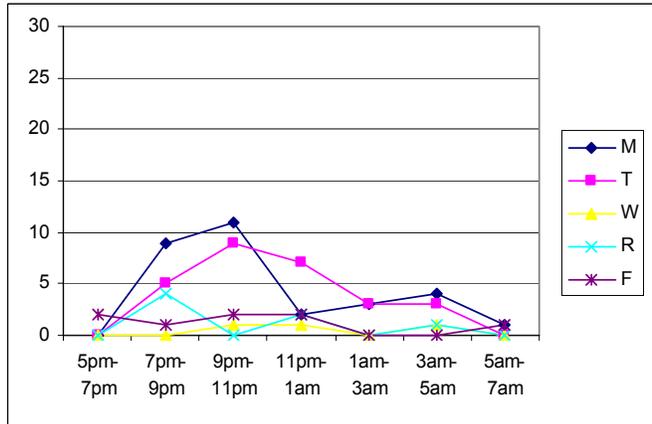


Figure 6: MMWR 24 Control Site Collections (6/11-6/15)

Figure 7: MMWR 24 Application Site Nightly Collection Totals With Midnight Temperatures (°F) (6/11-6/15)

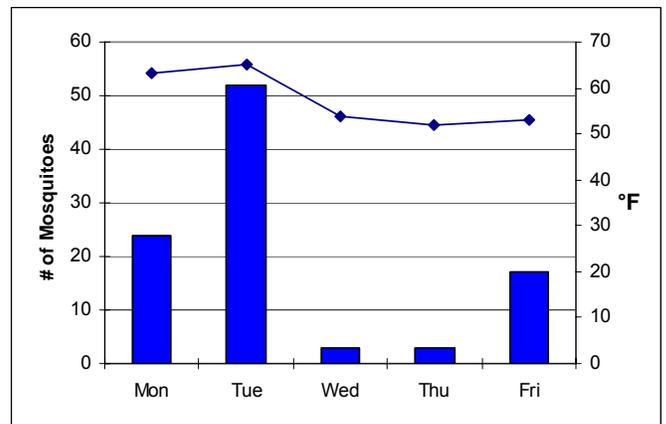
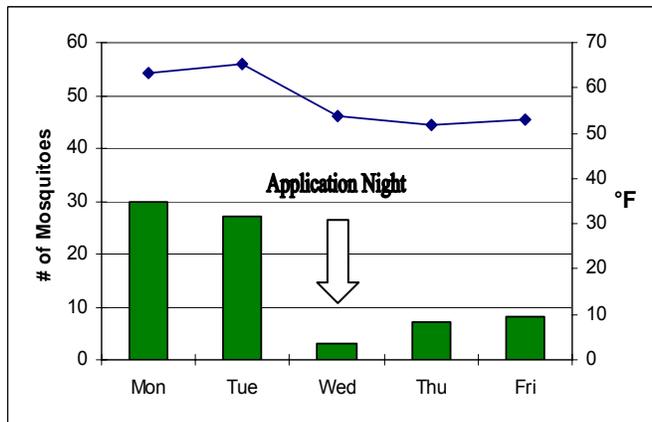


Figure 8: MMWR 24 Control Site Nightly Collection Totals With Midnight Temperatures (°F) (6/11-6/15)

EFFICACY TRIAL #3

The control obtained for MMWR 25 was relatively good for the application night as well as the two evenings after, although the second post application night had a dip that was similar to that of the control site. A rain event was recorded for the first post-application evening, possibly impacting the collection numbers of both sites. Field technicians noted the wind traveling from the spray origin toward the application site trap location (Figures 9-12). Despite these factors, the MMWR 25 trial showed good control.

Figure 9: MMWR 25 Application Site Collections (6/18-6/22)

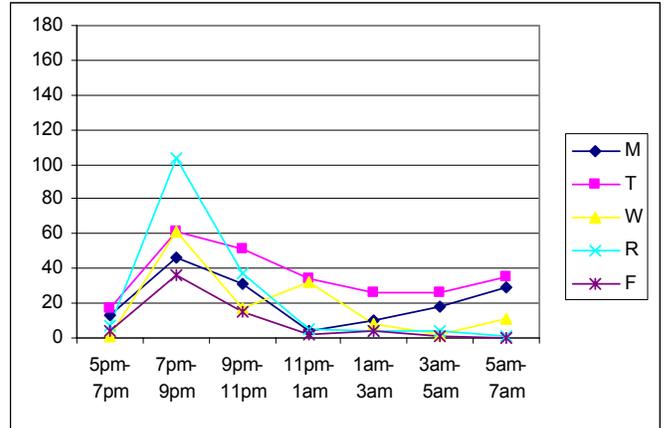
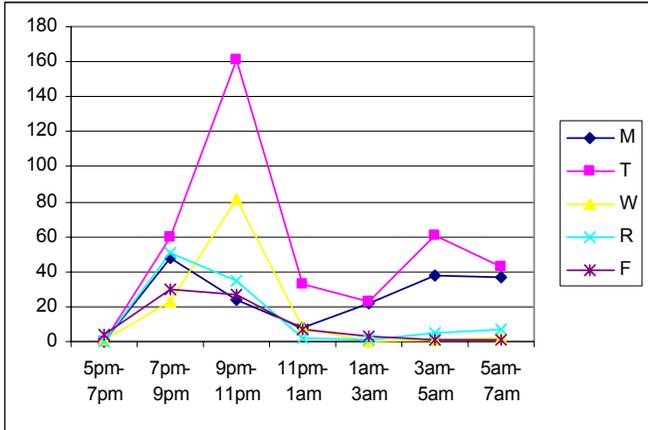


Figure 10: MMWR 25 Control Site Collections (6/18-6/22)

Figure 11: MMWR 25 Application Site Nightly Collection Totals With Midnight Temperatures (°F) (6/18-6/22)

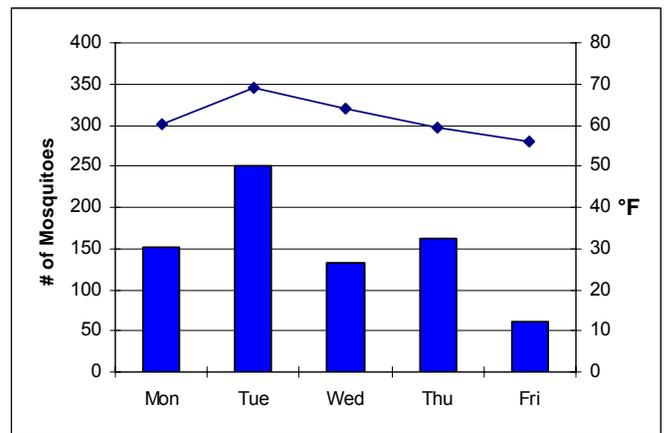
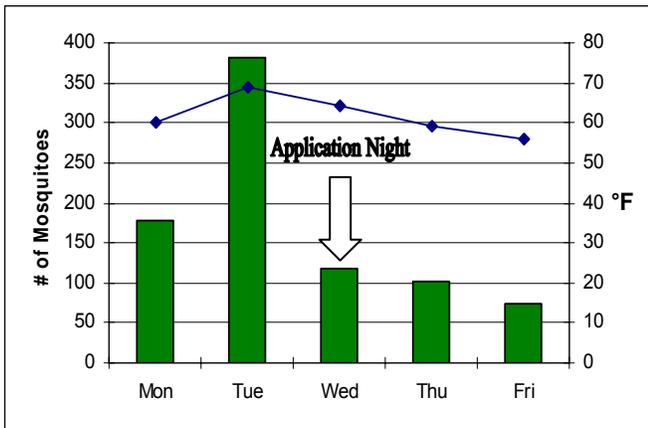


Figure 12: MMWR 25 Control Site Nightly Collection Totals With Midnight Temperatures (°F) (6/18-6/22)

EFFICACY TRAIL #4

For the MMWR 28 trial set, the application night control was good, but eventually it returned to pre-application levels, which mirrored the control site population changes as well. Field technicians noted that there was very little wind present during the application, and it was followed by a brief rain event as well. These observations may have influenced the results of the application (Figures 13-16).

Figure 13: MMWR 28 Application Site Collections (7/9-7/13)

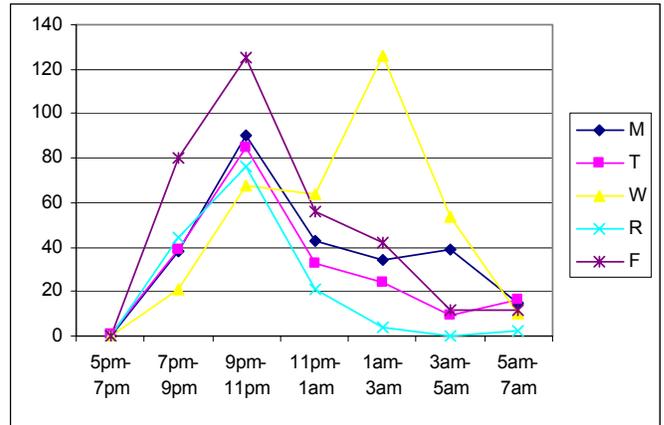
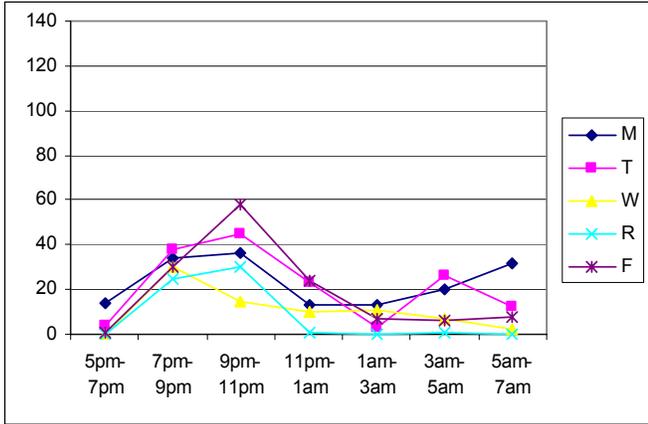


Figure 14: MMWR 28 Control Site Collections (7/9-7/13)

Figure 15: MMWR 28 Application Site Nightly Collections With Midnight Temperatures (°F) (7/9-7/13)

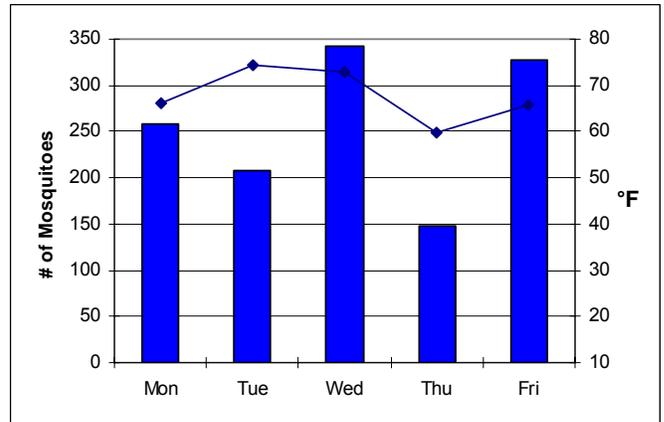
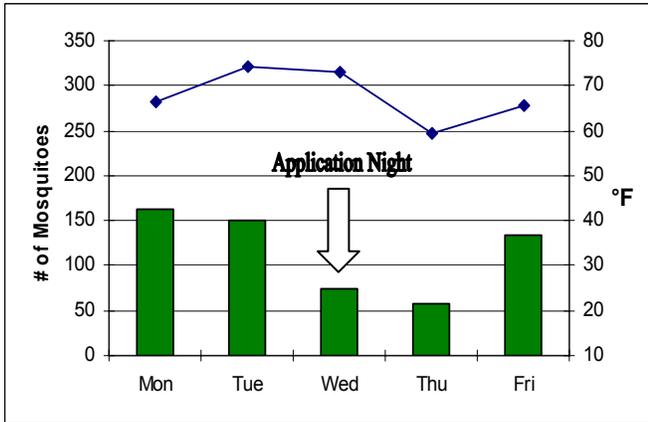


Figure 16: MMWR 28 Control Site Nightly Collections With Midnight Temperatures (°F) (7/9-7/13)

EFFICACY TRIAL #5

The MMWR 29 trial set showed good control for the application night and post-application evening before populations returned to pre-application levels. The post-application evening control may not be as significant because the corresponding night for the control site also had lowered levels from pre-application numbers. Field technicians also noted very little wind on the application evening, which could have hampered the results of the application (Figures 17-20).

Figure 17: MMWR 29 Application Site Collections (7/16-7/20)

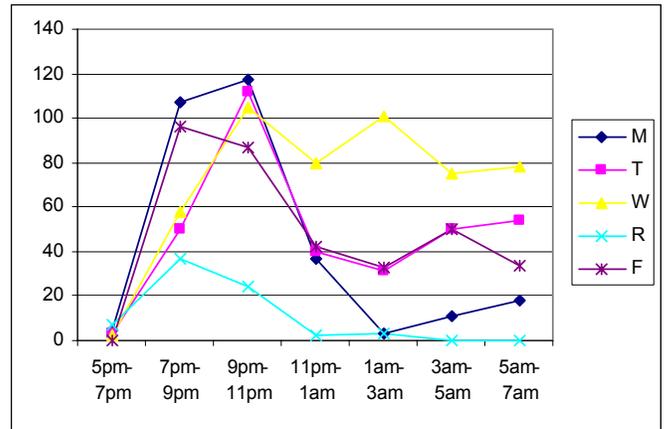
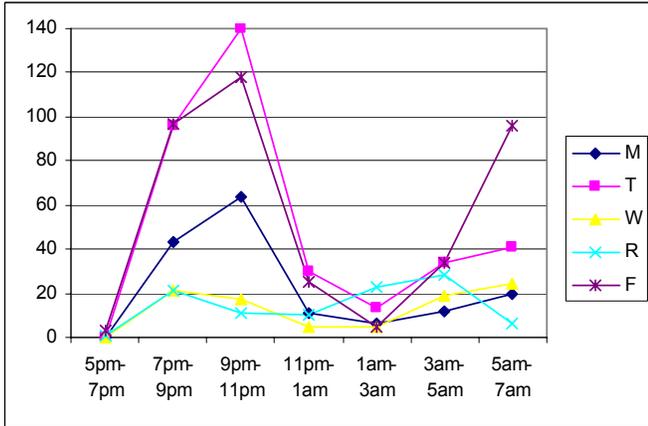


Figure 18: MMWR 29 Control Site Collections (7/16-7/20)

Figure 19: MMWR 29 Application Site Nightly Collections With Midnight Temperatures (°F) (7/16-7/20)

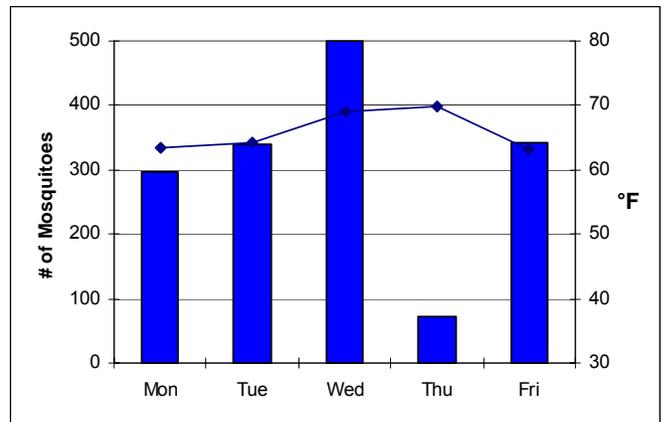
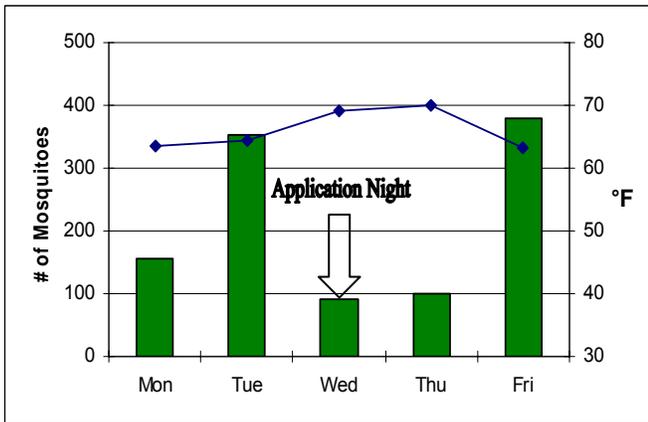


Figure 20: MMWR 29 Control Site Nightly Collections With Midnight Temperatures (°F) (7/16-7/20)

EFFICACY TRIAL #6

The MMWR 30 trial set had a similar trend to the previous weeks. The collections from the application night showed good control, but the post-application evening was not, eventually returning to pre-application levels. The wind direction was favorable during the application, although the wind speed was very low. A rain event on the last evening may have impacted the collections of that night (Figures 21-24).

Figure 21: MMWR 30 Application Site Collections (7/23-7/27)

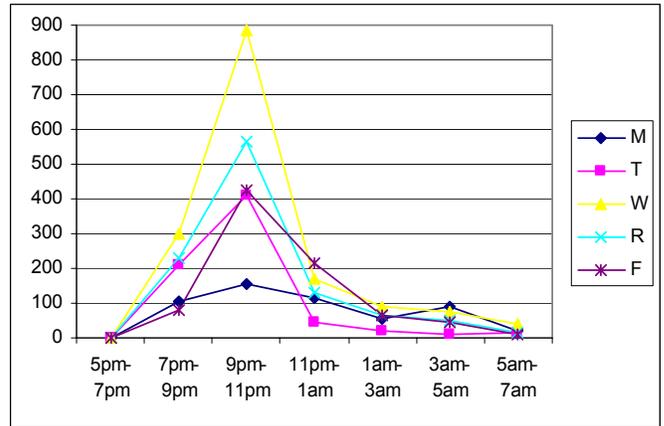
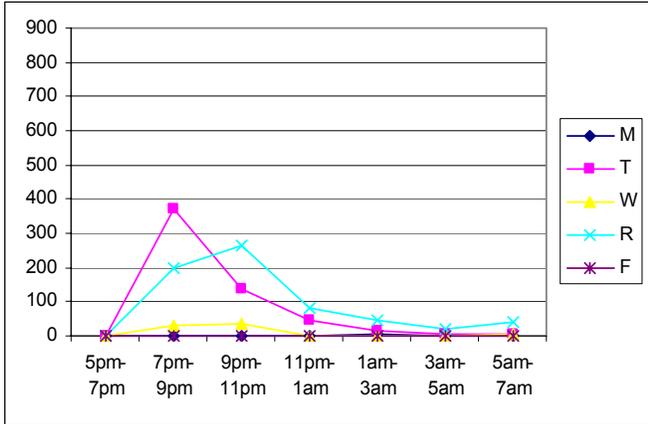


Figure 22: MMWR 30 Control Site Collections (7/23-7/27)

Figure 23: MMWR 30 Application Site Nightly Collections With Midnight Temperatures (°F) (7/23-7/27)

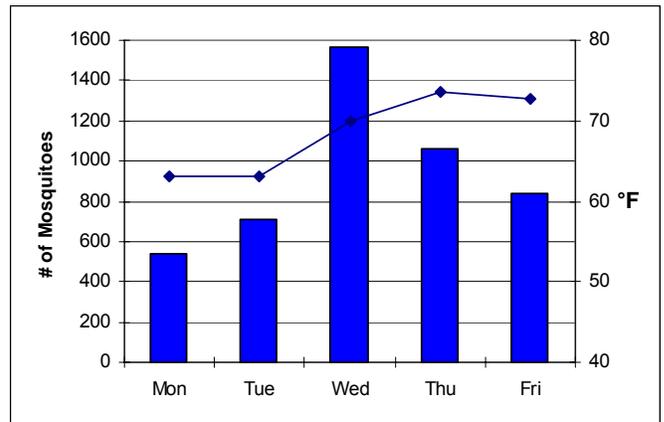
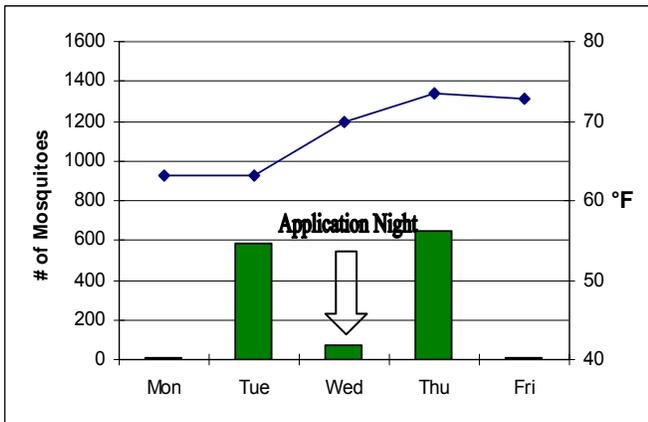


Figure 23: MMWR 30 Control Site Nightly Collections With Midnight Temperatures (°F) (7/23-7/27)

EFFICACY TRIAL #7

The MMWR 32 was the last trial set of the study and again showed similar results to the other weeks. The collections from the application night exhibited good control as did the two post-application collections. Observed wind direction during the application seemed favorable as well as wind speed. Despite the lower post-application collection numbers of the application site, the control site also exhibited similar changes during this time (Figures 25-28).

Figure 25: MMWR 32 Application Site Collections (8/6-8/10)

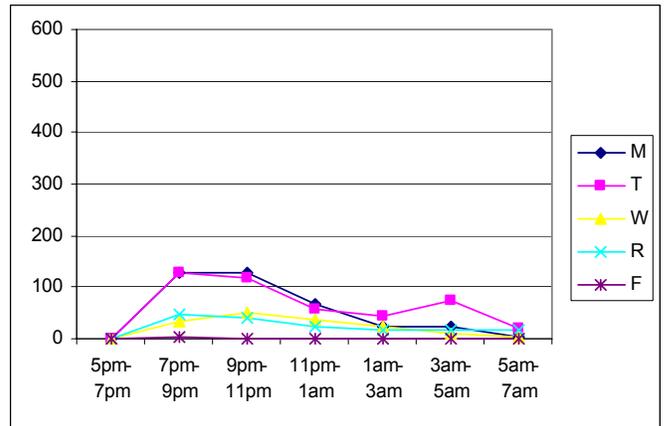
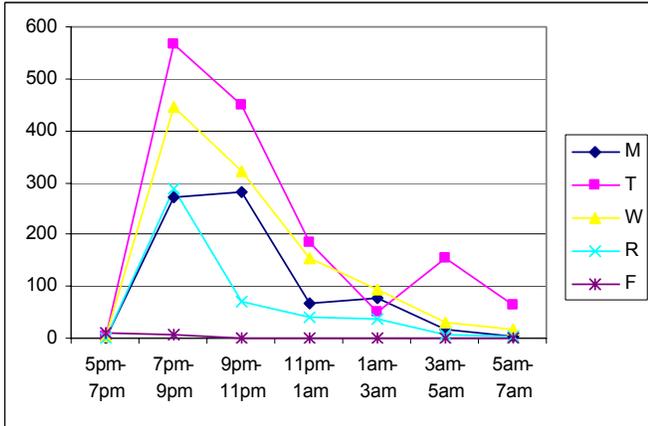


Figure 26: MMWR 32 Control Site Collections (8/6-8/10)

Figure 27: MMWR 32 Application Site Nightly Collections With Midnight Temperatures (°F) (8/6-8/10)

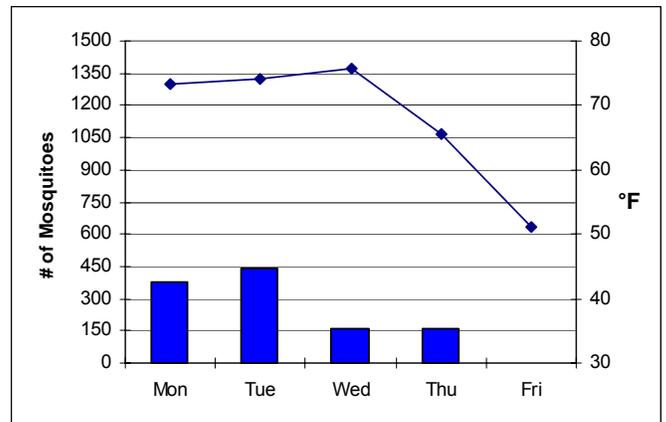
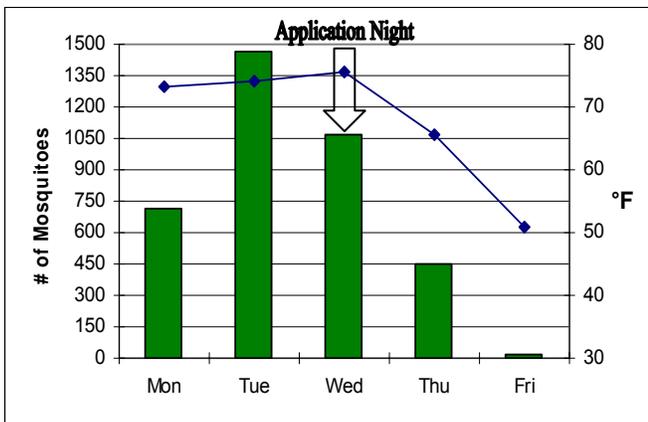


Figure 28: MMWR 32 Control Site Nightly Collections With Midnight Temperatures (°F) (8/6-8/10)

DISCUSSION

As previously discussed, many past efficacy studies of ULV applications involve using caged mosquitoes. Using caged mosquitoes has its advantages with many less variables, but doesn't necessarily give you an accurate picture of what's really happening. Caged mosquitoes can judge the efficacy of an adulticide product very well, but may not mimic the actual field results of an adulticide program. With our residential field trials one has to factor in the role that weather plays on natural mosquito populations, as well as irregular road design, vegetation and obstructions at the residence, and migration of neighboring mosquitoes to name a few. I think that many of these problems associated with natural mosquito population field trials were apparent in our study.

Overall, our study showed that control was achieved for approximately one to two nights before the mosquito populations returned to pre-application levels. This was similar to another study where one day post treatment control was good, but then after two days post-treatment populations began to return to pretreatment levels. Authors involved seemed to believe that this rebound was due to quick reinfestation of area and also some weather factors (Mount 1998).

I believe that the findings in this study were primarily a product of rapid reinfestation by neighboring mosquito populations. This migration of mosquitoes was made more easily due to the fact that the target areas were relatively small, and like other synthetic pyrethroids, leaves very little residual and has a rapid breakdown (Lesser 1998). This property of the chemical lends itself to a quicker reinfestation compared to that of a barrier treatment with higher residual characteristics. Even if the target areas were to be expanded, some of the site locations would not have provided a road network that would have allowed for a greater penetration of the insecticide into the forested areas. If applications were able to have been made on an adequate road design around the target site such as a street layout using a grid pattern with low to moderate foliage, control results would have been improved. Most of these locations also contained at least some vegetative cover, which could have impacted the results.

Despite these results it is not believed that a significant change in procedure is needed. Possibly a slight increase in dosage rate, which would still be under the allowable EPA and label rates, may improve control, especially in vegetative cover instances. This increase would also help in less than ideal weather conditions. Another possible change in procedure could be to try to increase coverage whenever allowable. Spray applicators always need to consider whether or not to apply when conditions are doubtful. Applications in unsuitable conditions may not be providing much control, wasting product and increasing the potential for negative environmental impact. If adjustments to the application procedure are not made, future spray events should not be expected to result in different control levels as compared to our study.

ACKNOWLEDGEMENTS

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Commissioners

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2006 Landing Rates

TOWN	DIST	DATE	MAP SECTION	EXACT LOCATION	TYPE OF AREA 1	TYPE OF AREA 2	TIME	TEMP.	WIND	WEATHER IN GENERAL	# MINUTES	# MOSQUITOES	SURVEYED BY	AREA SPRAYED?	SPECIES ID	COMMENTS
Sherborn	4	26-May	6,8	Farm Rd. house #112	residential	heavily wooded	7:15am		70	0-3	overcast	1	3	tw	yes	
Wilmington	1	25-May	16	6 Tow Path Dr.	residential		9:55am		57	3	overcast	5	6	jb	yes	
BillERICA	1	30-May	15	46 Glad Valley Rd.	residential	lightly wooded	6:55pm		62	5	nice	5	4	jb	yes	CAN
BillERICA	1	30-May	4	14 Fredrickson Rd.	residential	open	7:00pm		68	4	nice	5	4	jb	yes	Oc. sp.
BillERICA	1	30-May	24	200 High St.	residential	lightly wooded	9:00pm		57	4	nice	5	5	jb	yes	CAN
BillERICA	1	30-May	10	21 Gov. Doherty Rd.	residential	lightly wooded	9:30pm		57	5	nice	5	3	jb	yes	CAN
BillERICA	1	30-May	1	Duncan Dr.	residential		8:20pm		69	5	nice	5	4	jb	yes	VEX
Ayer	2	30-May	2	1 Taft St.	lightly wooded		3:00pm		80	0.5		1	1	healy	yes	CAN
Northboro	3	30-May	6	125 Rice Ave.	residential	lightly wooded	5:00pm		75	1.2	nice	5	2	st. germain	yes	
Clinton	3	30-May	4	5 Clamshell Rd.	residential	lightly wooded	8:45pm		67	0.8	nice	5	2	st. germain	yes	
Berlin	3	30-May	1	23 Eastbrook Ln.	residential	heavily wooded	9:10pm		67	1.6	nice	3	3	st. germain	yes	
Lunenburg	2	30-May	15	314 Highland St.		heavily wooded	4:00pm		77	0.9		2	2	healy	yes	STM
Leominster	2	30-May	2	364 Prospect St.	lightly wooded		6:43pm		73	0.6		2	2	healy	yes	ABS/PCT
Fitchburg	2	30-May	19	689 High rock Rd.	heavily wooded		5:30pm		79	1		2	3	healy	yes	ABS/PCT
Tewksbury	1	1-Jun	17	71 Debra Dr.	residential	open			67	3	muggy/overcast	5	5	jb	yes	ABS/PCT
Tewksbury	1	1-Jun	23	997 Chandler St.	residential	heavily wooded	8:36pm		69	3	muggy/overcast	5	3	jb	yes	VEX & CAN
Tewksbury	1	1-Jun	15	178 Pike St.	residential	lightly wooded			68	3	muggy/overcast	5	4	jb	yes	CIN
Tewksbury	1	1-Jun	22	65 Charles Dr.	residential	lightly wooded			68		muggy/overcast	5	6	jb	yes	FIT
Tewksbury	1	1-Jun	25	394 Shawsheen St.	residential	lightly wooded	9:15pm		65	4	muggy/overcast	5	5	jb	yes	CAN
Northbridge	5	1-Jun	5,6	837 Mendon St.	residential	heavily wooded	5:00pm		78	1	warm	1	5	briggs	yes	
Northbridge	5	1-Jun	2	68 Nicole Ave.	residential	lightly wooded	3:30pm		80	2	warm	1	5	briggs		
Northbridge	5	1-Jun	9	212 Union St.	residential	lightly wooded	4:00pm		80	1	warm	1	10	briggs	yes	
Northbridge	5	1-Jun	4	54 Railroad St.	residential	heavily wooded	3:45pm		80	1	warm	1	7	briggs	yes	
Chelmsford	1	31-May	13	5 York Ave.	residential	lightly wooded	9:55pm		64	3	nice	5	6	jb	yes	VEX
Chelmsford	1	31-May	14	28 Marshall St.	residential		9:30pm		65	2	nice	5	4	jb	yes	CIN
Chelmsford	1	31-May	10	7 Buckman Dr.	residential	lightly wooded	9:10pm		68	3	nice	5	5	jb	yes	CIN
Chelmsford	1	31-May	11	21 Reid Rd.	residential	lightly wooded	8:05pm		68	3	nice	5	3	jb	yes	ABS/PCT
Chelmsford	1	31-May	11	171 Robin Hill Rd.	residential	lightly wooded	7:30pm		68	4	nice	5	4	jb	yes	STM
Holliston	4	31-May		59 Westfield Dr.	residential	heavily wooded	11:15pm		68	2	cloudy	5	3	tw	yes	
Holliston	4	31-May		100 Gretchen Ln.	residential	heavily wooded	7:45pm		75	6	cloudy	4	3	tw	yes	
Holliston	4	31-May		22 Linden St.	residential	heavily wooded	8:30pm		73	3	cloudy	3	3	tw	yes	
Southboro	3	8-Jun	14	Wildwood Dr.	residential	lightly wooded	9:30pm		61.9	0	overcast	4	3	st. germain	yes	
Ashland	4	8-Jun		38 Nancy Dr.	residential	heavily wooded	8:00pm		68	1	cloudy	3	6	mp	yes	Oc. sp.
Northboro	3	8-Jun		15 Smith St		heavily wooded	7:00pm		60.9	1.3	overcast	3	5	st. germain	yes	
Westboro	4	8-Jun		11 Brady Rd. Ext.	residential	heavily wooded	7:30pm		66	1	cloudy	3	7	mp	yes	Oc. sp.
Sherborn	4	8-Jun		81 Lake St.	residential	lightly wooded	8:30pm		68	1	cloudy	3	10	mp	yes	Oc. sp.
Natick	4	8-Jun		41 Sylvester Rd.	residential	swamp/heavily wooded	10:00pm		63	1	cloudy	3	10	mp	yes	Oc. sp.
Stow	2	8-Jun	5	48 Wildwood Rd.	residential	lightly wooded	4:15pm		61.2	0.3		2	3	rg	yes	Oc. sp.
Stow	2	8-Jun	3, 4	232 Gleasondale Rd.		heavily wooded	5:00pm		60.9	0.2		2	3	rg	yes	Oc. sp.
Stow	2	8-Jun	1, 2	317 Boxboro Rd.			6:50pm		60.7	0.2		2	2	rg	yes	PER
Leominster	2	8-Jun	1	Wildwood Condo	residential	lightly wooded	9:50pm		56.7	0.1	overcast					Oc. sp.
Fitchburg	2	8-Jun	10	Cogg Shall Park		heavily wooded	8:00pm		59.9	0.6	overcast	1	1	healy		CAN
Wilmington	1	8-Jun	3	5 Pine View Rd.	residential	lightly wooded	5:45pm		65	3	overcast	5	8	jb	yes	EXC
Tewksbury	1	8-Jun	3	759 Livingston St.	residential	open	6:30pm		62	3	overcast	5	4	jb	yes	Oc. sp.
BillERICA	1	8-Jun	3	82 Bicknell St.	residential	heavily wooded	7:20pm		65	3	overcast	5	4	jb	yes	STM
BillERICA	1	8-Jun	4	22 Jeff Rd.	residential	lightly wooded	8:00pm		67	3	light rain	5	3	jb	yes	ABS
BillERICA	1	8-Jun	4	93 Shawsheen Rd.	residential	lightly wooded	7:45pm		65	3	overcast	5	8	jb	yes	TVT
Westford	1	6-Jun	12	19 Crown Rd.	residential	heavily wooded	7:30pm		68	0-1	partly cloudy	1	3	tw	yes	
Westford	1	6-Jun		20 Hartford Rd.	residential	heavily wooded	8:00pm		67	0-1	partly cloudy	1	3	tw	yes	
Westford	1	6-Jun		29 Gould Rd.	residential	heavily wooded	9:15pm		65	0-2	partly cloudy	1	3	tw	yes	
Chelmsford	1	6-Jun	15	11 Natalie Rd.	residential	lightly wooded	6:30pm		68	4	nice	5	5	jb	yes	CIN
Chelmsford	1	6-Jun	16	161 Proctor Rd.	residential	lightly wooded			68	4	cloudy	5	5	jb	yes	TVT
Chelmsford	1	6-Jun	9	74 Bridge St.	residential	lightly wooded	8:15pm		67	3	nice	5	3	jb	yes	TVT
Chelmsford	1	6-Jun	10	23 Glen Ave.	residential	heavily wooded	9:15pm		67	3	nice	5	5	jb	yes	TVT
Chelmsford	1	6-Jun	2	631 Wellman Ave.	residential	lightly wooded	9:35pm		68	4	nice	5	4	jb	yes	VEX
Hudson	3	6-Jun		6 Fieldstream Ln.	residential	heavily wooded	10:45pm		64	1		5	3	briggs	yes	
Hudson	3	6-Jun		Munson St.	residential	lightly wooded	10:20pm		67	0		5	5	briggs	yes	
Hudson	3	6-Jun		4 Patriot Ln.	residential	lightly wooded	9:35pm		67	0		5	3	briggs	yes	
Hudson	3	6-Jun		33 Wilkins St.	residential	heavily wooded	9:15pm		64	0		5	8	briggs	yes	
Hudson	3	6-Jun		10 Shay Rd.			8:40pm		67	1		5	7	briggs		
Hudson	3	6-Jun		84 Cheryl Rd.	residential	lightly wooded	8:10pm		72	1		3	10	briggs	yes	ABS & EXC
Holliston	4	6-Jun	5, 6	163 Chamberlain Rd.	residential	heavily wooded	5:30pm		75	2		1	1	healy		VEX
Holliston	4	6-Jun	13	423 South St.	residential	lightly wooded	5:50pm		74.8	0.9		1	1	healy		VEX
Hopkinton	4	6-Jun		92 Wood St.	residential	lightly wooded	4:00pm		76	3	clear	3	6	mp	yes	CAN
Hopkinton	4	6-Jun		5 Hearthstone Rd.	residential	lightly wooded	5:00pm		74	4	clear	3	7	mp	yes	Oc. sp.
Hopkinton	4	6-Jun		Bullmoose Run	residential	heavily wooded	6:00pm		75	3	clear	3	10	mp	yes	CTT
Hopkinton	4	6-Jun		15 North St.	residential	lightly wooded	7:00pm		72	3	clear	3	6	mp	yes	Oc. sp.
Auburn	3	6-Jun		Meetinghouse Condos	residential		10:30pm		66	1.3	cool	2	3	st. germain	yes	
Millbury	3	6-Jun	4	9 Rayburn Dr.	residential		7:45pm		70	1.2	nice	3	2	st. germain	yes	
Ashland	4	5-Jun		22 Edgewood Rd.	residential	heavily wooded	9:30pm		70	1	clear	3	8	mp		Oc. sp.
Ashland	4	5-Jun		64 Raymond Rd.	residential	heavily wooded	9:00pm		72	1	clear	3	6	mp	yes	Oc. Jap
Ashland	4	5-Jun		19 Strobus Lane	residential	lightly wooded	8:30pm		70	1	clear	3	5	mp	yes	Oc. Exc
Ashland	4	5-Jun		39 tudor Lane	residential	heavily wooded	9:00pm		72	1	cloudy	3	7	mp	yes	Oc. Stl
Ayer	2	5-Jun	1,2	Groton School Road		heavily wooded	5:00pm	67.9	.2			2	3	rg		Co. PER
Ayer	2	5-Jun	8	#12 High Street		lightly wooded	5:15pm		67.5	0.5		2	1	rg		Oc. STI

2006 Landing Rates

TOWN	DIST	DATE	MAP SECTION	EXACT LOCATION	TYPE OF AREA 1	TYPE OF AREA 2	TIME	TEMP.	WIND	WEATHER IN GENERAL	# MINUTES	# MOSQUITOES	SURVEYED BY	AREA SPRAYED?	SPECIES ID	COMMENTS
Ayer	2	5-Jun		4 #32 Wright Road		heavily wooded	5:40pm	65.1			2	5	rg		Oc. CAN	
Berlin	3	5-Jun		6 Sawyer Hill Road			2:50pm	69.9	0.1	light wind	1	1	S.Healy		Ae. VEX	
Berlin	3	5-Jun		5 West Main Street pole #33	Swamp	heavily wooded	3:00pm	69.9	0.1	light wind	1	1	S.Healy		Oc. CAN	
Billerica	1	5-Jun		11 Ross Road	residential	lightly wooded	6:10pm	86	3	light wind	5	4	J.B.	yes	Ae. VEX	
Billerica	1	5-Jun		9 161 Allen Road	residential	lightly wooded	7:25pm	68	3	light wind,ni.	5	5	J.B.	yes	Ae. VEX	
Billerica	1	5-Jun		5 9 Garden Brook Road	residential	lightly wooded	7:55pm	68	4	light wind,ni.	5	6	J.B.	yes	Oc. CAN	
Billerica	1	5-Jun		16 277 Andover Road	residential	lightly wooded	5:45pm	65	3	light wind,ni.	5	3	J.B.	yes	Oc. sp.	
Billerica	1	5-Jun		5 #34 Pines Road	residential	heavily wooded	8:30pm	65	4	light wind,co.	5	4	J.B.	yes	Oc. sp.	
Clinton	3	5-Jun		5 3 Bolton Road	residential	lightly wooded	3:20pm	69.7	0	light wind	2	2	S. Healy		Oc. EXC	
Clinton	3	5-Jun		6 Ridgefield Condos	residential	lightly wooded	3:30pm	68.9	0.2	light wind	3	2	S. Healy		Oc. EXC	
Clinton	3	5-Jun		3 High Street (W.W.T.P.)	residential	open	10:45pm	67.7	0	light wind	1	1	S.Healy		Ae. VEX	
Hopedale	4	5-Jun		37 Freedom Street	residential	lightly wooded	8:20pm	72	0	cool,calm	5	4	J.Briggs	yes	1(An.QUA)3(Ae.VEX)	
Lunenburg	2	5-Jun	3,15	#325 West Townsend Rd.		heavily wooded	3:55pm	68.2	0.5	light wind	1	2	R.G.	yes	Oc. Sp.	
Lunenburg	2	5-Jun	14	Royal Fern Drive		heavily wooded	4:15pm	68	0.3		1	1	R.G.	yes	Oc. INT	
Lunenburg	2	5-Jun	10	Cortland Circle		heavily wooded	4:30pm	67.8	0.2		2	2	R.G.	yes	Oc. INT	
Milford	4	5-Jun		Bodie Circle	residential	heavily wooded	9:10pm	70	0	cool,calm	5	4	J.Briggs	yes	3 Ae. VEX	
Milford	4	5-Jun		8 Kellett Drive	residential	open	9:20pm	66	0	cool,calm	5	3	J.Briggs			
Milford	4	5-Jun		6 Oak Terrace	residential	lightly wooded	9:55pm	65	0	cool,calm	5	4	J.Briggs	yes	3 Ae. VEX	
Milford	4	5-Jun	116	Village at Silver Hill	residential	lightly wooded	10:40pm	63	1	light wind	5	3	J.Briggs	yes		
Dracut	1	30-May		Stonebridge	residential	heavily wooded	7:40pm	64	0.7	light wind	5	3	C.D.S.			
Dracut	1	30-May		Myron Street	residential	lightly wooded	8:45pm	63	0.7	light wind	3	2	C.D.S.			
Dracut	1	30-May		Loon Hill at Lexington	residential	heavily wooded	10:10pm	57	0.8	light wind	10	2	C.D.S.			
Dracut	1	30-May		Metheun Street (Campbell)	res,rec	light,open	10:35pm	57	0.8	light wind	5	1	C.D.S.			
Ayer	2	26-Jun	1,2	Groton-Shirley Road		lightly wooded	6:20pm	77	0.5		1	2	R.G.	Yes	Oc.sp.	
Lunenburg	2	26-Jun	10	#644 Flat-Hill Road		heavily wooded	4:50pm	78	0.3		1	3	R.G.	Yes	Oc EXC	
Clinton	2	26-Jun		5 #5 Nathan Drive	residential		3:32pm	80	0.3		1	2	R.G.	Yes	Oc. CAN	
Billerica	1	26-Jun		11 9 Brittany Lane	residential	lightly wooded	8:40pm	76	4	li.,steady w.	5	8	J.B.	yes	Oc. CAN	
Billerica	1	26-Jun		7 155 Baldwin Road	residential	lightly wooded	9:05pm	77	4	li.,gusty win.	5	5	J.B.	Yes	Oc. Can	
Billerica	1	26-Jun		7 7 Charles gate Road	residential	lightly wooded	9:15pm	76	4	light wind	5	6	J.B.	Yes	Oc. Sp.	
Billerica	1	26-Jun		3 60 Bicknell Road	residential	lightly wooded	10:15pm	75	4	light wind	5	6	J.B.	Yes	Oc. Ae. VEX	
Billerica	1	26-Jun		11 20 Gray Street	residential	lightly wooded	8:00pm	78	5	li.,steady.wi.	5	10	J.B.	Yes	Ae. VEX	
Blackstone	5	26-Jun		234 Mendon Street	residential	heavily wooded	8:45pm	74	1	light wind	3	7	J.B.	Yes		
Blackstone	5	26-Jun		8 Windsor Road	residential	lightly wooded	9:20pm			light wind	5	3	J.B.	Yes		
Blackstone	5	26-Jun		291 Farm Street	residential	heavily wooded	9:40pm	73	4	light wind	5	5	J.B.	Yes		
Hopedale	4	26-Jun		12 Haven Way	residential	open	9:50pm	72	3	light wind	5	4	J.B.	Yes		
Milford	4	26-Jun		353 Purchase Street	residential	lightly wooded	11:00pm	69	2	light wind	5	6	J.B.	Yes		
Milford	4	26-Jun		155 Highland Street	residential	lightly wooded	10:45pm	71	3	light wind	4	5	J.B.	Yes		
Milford	4	26-Jun		17 Silva Street (new)	residential	lightly wooded	10:15pm	73	2	light wind	5	3	J.B.	Yes		
Millville	5	26-Jun	1	86 Providence Street	residential	lightly wooded	8:05pm	75	2	light wind	5	4	J.B.	Yes		
Millville	5	26-Jun		484 Chestnut Hill Road	residential	heavily wooded	8:20pm	75	4	light wind	3	8	J.B.	Yes		
Chelmsford		27-Jun		48 Parkerville Road	residential	heavily wooded	11:00pm	74	0.4	li.,wind,clear	5	3	T.W.	Yes		
Chelmsford		27-Jun		4 Higate Road	residential	He.,op,swamp	10:00pm	75	4	li.,wind,clear	1	3	T.W.	Yes		
Chelmsford				18 Pleasant Ave.	residential	He.,op,swamp	7:45pm	78	4.5	li.,wind,clear	4	3	T.W.	Yes		
Westford	1	27-Jun		6 Betty Lane	residential	He.,op,swamp	8:15pm	78	0.7	li.,wind,clear	5	3	C.D.S.			
Chelmsford	1	27-Jun		5 8 Foot Path Road	residential	lightly wooded	10:45pm	75	6	light wind	5	8	T.B.	Yes	Oc. STM	
Chelmsford	1	27-Jun		4 11 Tobin Ave.	residential	lightly wooded	8:00pm	78	6	li.,steady w.	5	7	T.B.	Yes	Oc. STI	
Chelmsford	1	27-Jun		10 5 Larssen Circle	residential	lightly wooded	8:50pm	78	5	li.,steady w.	5	5	T.B.	Yes	Oc.CAN	
Chelmsford	1	27-Jun		7 31 Miland Ave.	residential	lightly wooded	9:05pm	77	6	li.,steady w.	5	8	T.B.	Yes	Oc. Sp.	
Chelmsford	1	27-Jun		7 33 Brentwood Road	residential	lightly wooded	9:50pm	76	5	gusty wind	5	9	T.B.	Yes	CQ. PER	
Littleton	1	27-Jun		5 88 Bruce Street		heavily wooded	3:07pm	84	0.8		2	3	R.G.	Yes	Oc.Sp.	
Boxboro	2	27-Jun		763 Liberty Square Road		heavily wooded	2:50pm	82	1.2		1	1	R.G.	Yes	Oc. Sp.	
Westford	1	27-Jun		12 41 1/2 Hildreth Street		heavily wooded	5:05pm	80	1		1	2	R.G.	Yes	Oc.sp.	
Shrewsbury	3	27-Jun		11 Dean Park	recreational	heavily wooded	11:00pm	74.6	1.7	light wind	2	4	G.S.	Yes	Oc. sp.	
Hudson	3	27-Jun		6 Ridge Road	residential	heavily wooded	9:55pm	71	4	gusty wind	3	6	J.B.	Yes		
Hudson	3	27-Jun		255 Cox Street	residential	heavily wooded	9:15pm	72	3	light wind	5	3	J.B.	Yes	Oc. STM	
Hudson	3	27-Jun	5,6	72 Causeway Street	residential	lightly wooded	8:40pm	74	4	gusty wind	5	4	J.B.	Yes		
Hudson	3	27-Jun	8	Old County Road	residential	li. Wo.,swamp	8:05pm	78	2	light wind	2	20	J.B.	Yes	Oc. (STI), (STM)	
Hudson	3	27-Jun		Woodland Drive	residential	lightly wooded	10:25pm	69	2	light wind	4	9	J.B.	Yes	Oc.(STI),(STM);CQ (PER)	
Hopkinton	4	27-Jun		13 Victory Lane	residential	lightly wooded	8:30pm	75	5	light wind	3	5	M.P.	Yes	Oc. TVT	
Hopkinton	4	27-Jun		66 West Main Street	residential	lightly wooded	6:00pm	78	5	light wind	3	6	M.P.	Yes	Oc. STM	
Holliston	4	27-Jun		2 41 Westfield Drive	residential	heavily wooded	3:00pm	84.8	1.9	steady wind	1	1	S.Healy		Oc. STM	
Chelmsford	1	11-Jul		16 Rolling Green Lane	residential	lightly wooded	8:05pm	78	4	calm,muggy	5	8	J.B.	Yes	Ae. VEX	
Chelmsford	1	11-Jul		12 26 Hildreth Street	residential	lightly wooded	8:30pm	78	3	Mugg.,warm	5	7	J.B.	Yes	Oc.Sp.	
Chelmsford	1	11-Jul		12 21 Brian Road	residential	lightly wooded	8:50pm	77	3	Sticky,Muggy	5	8	J.B.	Yes	Ae. Vex.	
Chelmsford	1	11-Jul		12 8 Woodhead Road	residential	lightly wooded	9:15pm	77	4	Calm, Sticky	5	12	J.B.	Yes	Oc. Tri.	
Chelmsford	1	11-Jul		4 6 Technology Drive	residential	lightly wooded	10:50pm	77	3	Nice, sticky	5	6	J.B.	Yes	Oc. Tri.	
Boxborough	2	11-Jul		6 33 Prescott Rd.	residential	heavily wooded	4:30pm	80	4	intermit. Rain	3	1	S.M.	No		
Boxborough	2	11-Jul		6 33 Prescott Rd.	residential	heavily wooded	8:30pm	80	1	hazy,humid	8	0	S.M.			
Boxborough	2	11-Jul		31 Eldridge Road	residential	heavily wooded	4:50pm	80	3		3	1	S.M.			
Tewksbury	1	12-Jul		1 Mount Joy Rd.	residential	lightly wooded	8:00pm	75	3	unsettled, rain	5	6	T.B.		Oc. Can.	
Tewksbury	1	13-Jul		5 Kendall Rd.	residential	lightly wooded	8:30pm	76	3	unsettled, rain	5	5	T.B.		Male mosq.	
Tewksbury	1	12-Jul		5 89 Brentwood Road	residential	lightly wooded	9:00pm	77	3	Sticky,Muggy	5	7	J.B.		Oc. Can.	
Tewksbury	1	12-Jul		7 80 Barry Drive	residential	lightly wooded	9:30pm	78	3	overcast, rain	5	6	J.B.		non-mosquito	
Tewksbury	1	13-Jul		8 86 Trull Road	residential	lightly wooded	7:30pm	74	4	muggy,rain	5	8	J.B.		PER	
Wilmington		13-Jul		6 Perry Ave.	residential	heavily wooded	8:00pm	73	0.5	hazy,humid	2	3	T.W.	Yes		

2007 Landing Rates

TOWN	DIST	DATE	MAP SECTION	EXACT LOCATION	TYPE OF AREA 1	TYPE OF AREA 2	TIME	TEMP.	WIND	WEATHER IN GENERAL	# MINUTES	# MOSQUITOES	SURVEYED BY	AREA SPRAYED?
Northboro	3	29-May-07		1 67 Smith Rd.	Heavily wooded		8:00PM	68.5	1	nice	4	2	St. Germain	yes
Ashland	4	29-May-07		4 41 Edgewood Dr.	Heavily wooded	Residential	5:30PM	75	2	clear	3	10	Pojani	yes
Ashland	4	29-May-07		4 84 Raymond Way	Heavily wooded	Residential	5:00PM	75	2	clear	3	6	Pojani	yes
Ashland	4	29-May-07		78 Higley Rd.	Lightly wooded	Residential	4:30PM	78	3	clear	3	8	Pojani	yes
Ashland	4	29-May-07		11 Baldwin Cir.	Lightly wooded	Residential	4:00PM	78	3	clear	3	5	Pojani	yes
Ashland	4	29-May-07		31 Constitution St.	Heavily wooded	Residential	3:00PM	80	3	clear	3	6	Pojani	yes
Ayer	2	29-May-07		1 9 Groton School Rd.	Lightly wooded	Residential	3:05Pm	76.4	0.1	clear	1	2	Healy	yes
Ayer	2	29-May-07		8 28 Washington St.	Lightly wooded	Residential	3:20PM	75.8	0.3	clear	1	1	Healy	yes
Ayer	2	29-May-07		9 50 Shirley St.	Lightly wooded	Residential	3:30PM	76	0	clear	2	3	Healy	yes
Leominster	2	29-May-07		10 598 Central St.	Heavily wooded	Residential	4:15PM	77.3	0.4	clear	2	4	Healy	yes
Leominster	2	29-May-07		12 767 Willard St.	Heavily wooded	Residential	4:45PM	76.9	0.2	clear	3	5	Healy	yes
Milford	4	29-May-07		4 Field Pond Rd.	Lightly wooded	Residential	10:50PM	66.4	1	clear	5	4	Briggs	yes
Milford	4	29-May-07		18 110 Beaver St.	Lightly wooded	Residential	9:48PM	71.5	1	clear	5	3	Briggs	yes
Milford	4	29-May-07	16,17	19 Fruit St.	Lightly wooded	Residential	9:10PM	75.7	1	clear	5	3	Briggs	yes
Hopedale	4	29-May-07		6 15 Whitney St.	Lightly wooded	Residential	8:32PM	77.8	1	clear	5	5	Briggs	yes
Lunenburg	2	29-May-07		4 Upland Ave./electric ave	Lightly wooded		4:15PM	75	0.5		2	1	Greite	yes
Lunenburg	2	29-May-07		15 314 Highland St.	Heavily wooded		4:24PM	75.3	0.5		2	2	Greite	yes
Lunenburg	2	29-May-07	8,10	526 Burrage St.			5:45PM	71.8	0.5		1	1	Greite	yes
Lunenburg	2	29-May-07		14 Gilcrest St.	Heavily wooded		8:15PM	66.5	0		2	2	Greite	yes
Hopkinton	4	30-May-07		1 30 Rocky Woods Rd.	Lightly wooded	Residential	2:30PM	85	1	clear	3	6	Pojani	yes
Hopkinton	4	30-May-07		5 181 Saddlehill Rd.	Heavily wooded	Residential	2:45PM	85	5	clear	3	8	Pojani	yes
Hopkinton	4	30-May-07		2 18 Roosevelt Ln.	Lightly wooded	Residential	3:30PM	85	5	clear	3	5	Pojani	yes
Hopkinton	4	30-May-07	1,3	222 Winter St.	Heavily wooded	Residential	5PM	80	6	clear	3	6	Pojani	yes
Hopkinton	4	30-May-07	2,5	Fruit St./Rod and Gun	Heavily wooded	Swamp	11PM	74	3	clear	3	8	Pojani	yes
Westford	1	30-May-07		18 Mark Vincent Dr.	Lightly wooded	Residential	6PM	77.1	1.6	clear	2	2	Healy	yes
Westford	1	30-May-07		16 Koala Bear LN.	Lightly wooded		5:30PM	77.8	1.4	clear	1	2	Healy	yes
Chelmsford	1	30-May-07		15 6 Markham Dr.	Lightly wooded	Residential	8:30PM	72	3	nice	5	3	Begin	yes
Chelmsford	1	30-May-07		15 16 Thornton Ln.	Lightly wooded	Residential	8:35PM	75	3	nice	5	5	Begin	yes
Chelmsford	1	30-May-07		17 7 Cambridge St.	Lightly wooded	Residential	9:30PM	75	4	nice	5	5	Begin	yes
Chelmsford	1	30-May-07		16 87 Proctor Rd.	Lightly wooded	Residential	8:45PM	74	3	nice	5	3	Begin	yes
Chelmsford	1	30-May-07		16 16 Farley Brook Rd.	Lightly wooded	Residential	9:10PM	75	3	nice	5	4	Begin	yes
Shrewsbury	3	30-May-07		11 41 Westview Ave.	Lightly wooded	Residential	8PM	78		nice	5	3	St. Germain	yes
Holliston	4	30-May-07		114 Briarcliff Ln.	Heavily wooded	Residential	10:11PM	73.2	1	nice	3	8	Briggs	yes
Holliston	4	30-May-07		425 Underwood St.	Heavily wooded	Residential	9:40PM	73.4	1	clear	2	10	Briggs	yes
Holliston	4	30-May-07		4 35 Adams St.	Lightly wooded	Residential	10:55PM	73.4	1	clear	5	4	Briggs	yes
Holliston	4	30-May-07		11 237 Hill St.	Heavily wooded	Residential	8:34PM	73.3	1	clear	2	10	Briggs	yes
Acton	2	31-May-07		2 8 Dunston Rd.	Heavily wooded		6:48PM	69.8	0.5		2	3	Greite	yes
Tewksbury	1	31-May-07		22 65 Charme Dr.	Lightly wooded	Residential	6:30PM	73	4	overcast	5	6	Begin	yes
Tewksbury	1	31-May-07		22 60 Westcott Cir.	Open	Residential	6:00PM	73	3	overcast	5	4	Begin	yes
Tewksbury	1	31-May-07		21 43 Kane Ct.	Heavily wooded	Residential	5:25PM	73	4	overcast	5	7	Begin	yes
Tewksbury	1	31-May-07		14 94 Pinedale Ave.	Heavily wooded	Residential	5:10PM	73	4	overcast	5	8	Begin	yes
Tewksbury	1	31-May-07		14 38 Janet Ave.	Lightly wooded	Residential	5PM	73	2	overcast	5	4	Begin	yes
Natick	4	31-May-07		9 59 Fairview Ave.	Heavily wooded	Residential	8:15PM	62	1.1.	cloudy	5	3	Welch	yes
Natick	4	31-May-07		6 15 Eisenhower Ave.	Lightly wooded	Residential	8:30PM	62	1.5	cloudy	4	3	Welch	yes
Natick	4	31-May-07		2 11 Pamela Rd.	Heavily wooded	Swamp	10:30PM	61	1	cloudy	1	3	Welch	yes
Billerica	1	4-Jun-07		16 Marshall School	Open		10:05PM	64	5	lite rain	5	0	Begin	no
Billerica	1	4-Jun-07		5 24 Pines Rd.	Lightly wooded	Residential	6:05PM	68	3	overcast	5	0	Begin	no
Billerica	1	4-Jun-07		1 1 "C" St.	Lightly wooded	Residential	5:20PM	63	5	rainy	5	0	Begin	no

2007 Landing Rates

TOWN	DIST	DATE	MAP SECTION	EXACT LOCATION	TYPE OF AREA 1	TYPE OF AREA 2	TIME	TEMP.	WIND	WEATHER IN GENERAL	# MINUTES	# MOSQUITOES	SURVEYED BY	AREA SPRAYED?
Billerica	1	4-Jun-07	4	9 Pasho Rd.	Lightly wooded	Residential	7Pm	65 4		rainy	5	0	Begin	no
Chelmsford	1	5-Jun-07	14	263 Riverneck Rd.	Lightly wooded	Residential	9:05PM	78 2		muggy	5	6	Begin	yes
Chelmsford	1	5-Jun-07	15	4 Coach Rd.	Lightly wooded	Residential	8:45PM	70 2		muggy	5	8	Begin	yes
Westford	1	5-Jun-07	16	10 Water Dr.	Lightly wooded	Residential	4:30PM	79.8 2.1		humid	2	3	Healy	yes
Westford	1	5-Jun-07	18	10 Jennifer Dr.	Lightly wooded	Residential	6PM	78.7 1.3		humid	1	4	Healy	yes
Littleton	1	5-Jun-07		Gilson Rd. Powerlines	Heavily wooded		8PM	71.2 0.5			2	4	Greite	yes
Tewksbury	1	6-Jun-07	6	2 Cayuga Rd.	Heavily wooded	Residential	6:15PM	68 2			2	1	MacNeil	
Tewksbury	1	6-Jun-07		142 North St.	Heavily wooded	Residential	6:45PM	65 0			2	5	MacNeil	
Tewksbury	1	6-Jun-07	17	100 Savire Ln.	Lightly wooded	Residential	9PM	73 3		clear	5	6	Begin	yes
Tewksbury	1	6-Jun-07	1	Joan St.	Lightly wooded	Residential	9:30PM	72 3		clear	5	8	Begin	yes
Tewksbury	1	6-Jun-07	20	Carter Green Condo	Lightly wooded	Residential	10:30PM	73 4		clear	5	5	Begin	yes
Wilmington	1	6-Jun-07		34 Morningside Dr.	Open	Swamp	11PM	56 2.1		cloudy	5	3	Welch	yes
Wilmington	1	6-Jun-07		46 Park St.	Open	Swamp	9:30PM	59 3.5		cloudy	3	3	Welch	yes
Wilmington	1	6-Jun-07		4 Nickerson Ave.	Heavily wooded	Swamp	8:30PM	61 3.7		cloudy	3	3	Welch	yes
Tewksbury	1	11-Jun-07	8	65 Martin Rd.	Lightly wooded	Residential	8PM	4		dry	5	3	Begin	yes
Tewksbury	1	11-Jun-07	16	7 Neptune St.	Lightly wooded	Residential	8:25PM	72 3		humid	5	8	Begin	yes
Tewksbury	1	11-Jun-07	3	10 Cardigan Rd.	Lightly wooded	Residential	6:40PM	72 3		dry	5	4	Begin	yes
Tewksbury	1	11-Jun-07	10	5 Louis Rd.	Lightly wooded	Residential	6PM	72 3		cloudy	5	6	Begin	yes
Ashland	4	11-Jun-07	9	4 Woodland Rd.	Lightly wooded	Residential	4PM	80 2		cloudy	3	6	Pojani	yes
Ashland	4	11-Jun-07	1	94 Heritage Ave.	Heavily wooded	Residential	5pm	80 3		cloudy	3	10	Pojani	yes
Ashland	4	11-Jun-07		19 Strobus Ln.	Heavily wooded	Residential	5:30PM	78 2		cloudy	3	8	Pojani	yes
Ashland	4	11-Jun-07	6	80 Raymond Way	Heavily wooded	Swamp	6:30Pm	78 2		cloudy	3	10	Pojani	yes
Ashland	4	11-Jun-07	7	33 Sherborne Cir.	Heavily wooded	Residential	8PM	72 2		cloudy	3	6	Pojani	yes
Lunenburg	2	11-Jun-07	5,6	Goodrich St.	Heavily wooded		8PM	70.8 0.5			1	3	Greite	yes
Milford	4	11-Jun-07		Village Cir.	Heavily wooded	Residential	10:45PM	72.4 1			5	6	Briggs	yes
Milford	4	11-Jun-07	1	39 Camp St.	Heavily wooded	Residential	9:47PM	70.4 1			5	3	Briggs	yes
Milford	4	11-Jun-07	18	13 Huff Rd.	Lightly wooded	Residential	8:34PM	73.6 1			5	4	Briggs	yes
Milford	4	11-Jun-07	1	45 Camp St.	Heavily wooded	Residential	4:21PM	68.2 1		rainy	1	15	Briggs	
Westboro	4	12-Jun-07		Lyman St.-State Hosp.	Heavily wooded		7:12PM	68.7 0.2			3	4	Swinerton	yes
Shrewsbury	3	12-Jun-07	13	15 Rice Rd.	Heavily wooded	Residential	9:30PM	68.2 0		nice	2	4	St. Germain	yes
Westford	1	12-Jun-07	18	Waler Cir.	Lightly wooded	Residential	2:30PM	76.1 0.8		cloudy	1	2	Healy	yes
Westford	1	12-Jun-07	13	Fairview Dr.	Lightly wooded	Residential	3PM	75.8 0.3		cloudy	2	2	Healy	yes
Westford	1	12-Jun-07	12	Hutchins Way	Lightly wooded	Residential	3:25PM	76.7 0.7		cloudy	1	1	Healy	yes
Westford	1	12-Jun-07	4	Stoneview Dr.	Lightly wooded	Residential	5:15PM	76 0.2		warm	3	2	Healy	yes
Westford	1	12-Jun-07	9	Pierce Ave.	Lightly wooded	Residential	5:40PM	75.7		sunny	2	1	Healy	yes
Boxboro	2	12-Jun-07	4	Cedarwood Rd.	Heavily wooded		8:16PM	68.9 0.6			1	2	Greite	yes
Billerica	1	12-Jun-07		294 Rangeway Rd.	Heavily wooded	Residential	3:45PM	73 2		showers	1	3	MacNeil	
Hudson	3	12-Jun-07		River Rd.			8:45PM	72 0		cloudy	10	3		no
Chelmsford	1	12-Jun-07	3	Main St. Meth. Church	Lightly wooded	Residential	10:55PM	68 3		muggy	5	6	Begin	yes
Hopkinton	4	12-Jun-07	3	308 W. Main St.	Heavily wooded	Residential	8PM	66 2		clear	3	10	Pojani	yes
Hopkinton	4	12-Jun-07	7,8	10 Hearthstone Rd.	Heavily wooded	Residential	6PM	70 3		clear	3	8	Pojani	yes
Hopkinton	4	12-Jun-07	4	176 Lumber St.	Heavily wooded	Residential	4PM	78 5		clear	3	6	Pojani	yes
Hopkinton	4	12-Jun-07	7	8 Hopkins Rd.	Heavily wooded	Residential	6:15Pm	70 2		clear	3	6	Pojani	yes
Hopkinton	4	12-Jun-07	7	9 Ericson Way	Lightly wooded	Residential	6:30PM	70 2			3	5	Pojani	yes
Billerica	1	12-Jun-07	15	9 Country Ln.	Lightly wooded	Residential	4:30PM	70 3		overcast	5	7	Begin	yes
Billerica	1	12-Jun-07	22	5 Colonial Dr.	Lightly wooded	Residential	4:05PM	70 3		overcast	5	8	Begin	yes
Billerica	1	12-Jun-07	24	6 Mary Rd.	Lightly wooded	Residential	6:35PM	69 3		overcast	5	5	Begin	yes
Billerica	1	12-Jun-07	28	7 Silversmith Way	Lightly wooded	Residential	7:10PM	69 3		muggy	5	7	Begin	yes

2007 Landing Rates

TOWN	DIST	DATE	MAP SECTION	EXACT LOCATION	TYPE OF AREA 1	TYPE OF AREA 2	TIME	TEMP.	WIND	WEATHER IN GENERAL	# MINUTES	# MOSQUITOES	SURVEYED BY	AREA SPRAYED?
Berlin	3	12-Jun-07		7 Gates Pond Rd.	Lightly wooded	Residential	7:40PM	71.5 0		nice	4	3	St. Germain	yes
Holliston	4	12-Jun-07		4 8 Beaver Brook Dr.	Lightly wooded	Residential	8:32	72.4 1		nice	3	7	Briggs	yes
Holliston	4	12-Jun-07		9 20 Morgan's Way	Lightly wooded	Residential	6PM	75.6 2.6		warm	2	10	Briggs	yes
Natick	4	13-Jun-07	2,6	59 N. Main St.	Lightly wooded	Residential	3PM	65 4		cloudy	3	4	Pojani	yes
Natick	4	13-Jun-07		14 14 Sassamon Rd.	Heavily wooded	Residential	5:30PM	58 4		cloudy	3	4	Pojani	no
Natick	4	13-Jun-07		9 Pond St., Dell Park	Heavily wooded	Residential	8PM	52 5		cloudy	3	5	Pojani	no
Acton	2	13-Jun-07		6 Central St.	Heavily wooded	Residential	8:35PM	53 1.8		cool	15	1	Healy	no
Acton	2	13-Jun-07		5 Mohawk Dr.	Lightly wooded	Residential	9:00PM	52 2.2.		cool	15	0	Healy	no
Chelmsford	1	13-Jun-07		11 4 McCormick Ln.	Heavily wooded	Residential	5:30PM	61 3		cool	1	1	MacNeil	
Chelmsford	1	13-Jun-07		16 178 Proctor Rd.	Heavily wooded	Residential	8:30PM	55 0		cool	2	1	MacNeil	
Chelmsford	1	13-Jun-07		12 3 Ansie Rd.	Lightly wooded	Residential	8:40PM	57 2			5	3	Briggs	yes
Chelmsford	1	13-Jun-07		10 16 Dawn Dr.	Lightly wooded	Residential	9:47PM	56 1			6	4	Briggs	yes
Chelmsford	1	13-Jun-07		9 35 Bridge St.	Lightly wooded	Residential	10:37PM	55 1			7	3	Briggs	yes
Northbridge	5	13-Jun-07		2115 Quaker St.	Heavily wooded	Residential	8:45PM	55 6		overcast	5	1	Swinerton	yes
Acton	2	13-Jun-07		1 Wyndcliff Dr.	Heavily wooded		8:41PM	53 1			10	0	Greite	no
Acton	2	13-Jun-07		3 110 Newtown Rd.	Heavily wooded		8:17PM	54 2			10	1	Greite	no
Marlboro	3	13-Jun-07		1 Robin Hill Rd.	Lightly wooded	swamp	8:20PM	56 5		cloudy	10	0	Allard	no
Westboro	4	13-Jun-07		5 Rogers Field	Open	swamp	8:30PM	54 4		chilly	7	3	St. Germain	no
Wilmington	1	13-Jun-07		41 Shawsheen Ave.	Heavily wooded	swamp	11:30PM	54 1		cloudy	6	2	Welch	yes
Wilmington	1	13-Jun-07		23 Marjorie Rd.	Heavily wooded	Residential	9:15PM	56 1		cloudy	6	3	Welch	yes
Wilmington	1	13-Jun-07		436 Middlesex Ave.	Lightly wooded	swamp	8:30PM	57 1		cloudy	6	2	Welch	yes
Stow	2	14-Jun-07		1 Packard Rd.			8:01PM	57 0			5	3	Greite	yes
Hopedale	4			6 9 Crockett Cir.	Heavily wooded	Residential	3:00PM	70 3		cloudy	3	5	Pojani	yes
Tewksbury	1	14-Jun-07		14 172 Pringle St.	Lightly wooded	Residential	7:10PM	64 4		overcast	5	8	Begin	yes
Holliston	4	14-Jun-07		12 124 Heritage Way	Heavily wooded	Residential	4:00PM	68 2		cloudy	3	6	Pojani	yes
Wilmington	1	14-Jun-07		10 53 Heritage Ave.	Lightly wooded	Residential	11:00Pm	54 1			10	4	Briggs	yes
Wilmington	1	14-Jun-07		7 182 Woburn St.	Heavily wooded	Residential	8:30Pm	57 1			5	3	Briggs	yes
Wilmington	1	14-Jun-07		6 51 North St.	Lightly wooded	Residential	9:40PM	55 1			7	3	Briggs	yes
Stow	2	14-Jun-07		4 Middlemost Way	Lightly wooded	Residential	7:30PM	56 0.6		cloudy	2	3	Healy	yes
Sherborn	4	14-Jun-07		50 Hunting Ln.	Heavily wooded	swamp	5:00PM	65 2		cloudy	3	6	Pojani	yes
Sherborn	4	14-Jun-07	10,11	445 Main St.	Lightly wooded	Residential	6:00PM	65 2		cloudy	3	5	Pojani	yes
Sherborn	4	14-Jun-07	7,11	16 Woodland St.	Heavily wooded	Residential	6:30 PM	62 2		cloudy	3	8	Pojani	yes
Tewksbury	1	14-Jun-07		1 28 Mt. Joy	Lightly wooded	Residential	8:40PM	62 4		overcast	5	5	Begin	yes
Tewksbury	1	14-Jun-07		13 151 Mitchell G. Dr.	Lightly wooded	Residential	8:05PM	60		overcast	5	6	Begin	yes
Tewksbury	1	14-Jun-07		16 Main St.	Recreational	Residential	11:05PM	56 4		overcast	5	6	Begin	yes
Tewksbury	1	14-Jun-07		23 Whipple Rd.	Lightly wooded	Residential	5:10Pm	63 4		overcast	5	7	Begin	yes
Tewksbury	1	15-Jun-07		14 Baldwin St.	Heavily wooded	Residential	8:20PM	68 3		clear	5	5	Begin	yes
Tewksbury	1	15-Jun-07		12 82 Martha Ave.			9:00PM	68 3		clear	5	8	Begin	yes
Tewksbury	1	15-Jun-07		5 693 East St.	Lightly wooded	Residential	9:45PM	68 4		cool	5	5	Begin	yes
Natick	4	15-Jun-07		4 6 Sundance Way	Heavily wooded	swamp	5:30PM	72 2		clear	3	6	Pojani	yes
Natick	4	15-Jun-07		14 14 Sassamon Rd.	Heavily wooded	Residential	6:00PM	70 2		clear	3	8	Pojani	yes
Natick	4	15-Jun-07		11 8 Sherman Ter.	Lightly wooded	Residential	4:00Pm	75 2		clear	3	5	Pojani	yes
Lunenburg	2	18-Jun-07	5,6	528 Goodrich St.	Heavily wooded		8:15PM	69 0.5			1	1	Greite	yes
Hopedale	4	18-Jun-07		4 Fieldstone Way	Heavily wooded	Residential	5:30PM	79 0.8		clear	4	3	Healy	yes
Hopedale	4	18-Jun-07		8 Mill St.	Lightly wooded	Residential	5:00PM	79 0.9		sunny	1	1	Healy	yes
Hopedale	4	18-Jun-07		2 Plain St.	Lightly wooded	Residential	4:30PM	80 0.4		warm	3	2	Healy	yes
Hopedale	4	18-Jun-07		6 Homepark Ave.	Lightly wooded	Residential	4:15pm	80 0.8		warm	1	2	Healy	yes
Hopedale	4	18-Jun-07		5 Freedom St.	Lightly wooded	Residential	3:00PM	81 0.7		warm	2	2	Healy	yes

2007 Landing Rates

TOWN	DIST	DATE	MAP SECTION	EXACT LOCATION	TYPE OF AREA 1	TYPE OF AREA 2	TIME	TEMP.	WIND	WEATHER IN GENERAL	# MINUTES	# MOSQUITOES	SURVEYED BY	AREA SPRAYED?
Ashland	4	18-Jun-07	1	2 Ivy Ln.	Lightly wooded	Residential	4:00PM	80	2	clear	3	6	Pojani	yes
Ashland	4	18-Jun-07	3	3 Tyler Ln.	Heavily wooded	Residential	5:30PM	80	2	clear	3	6	Pojani	yes
Ashland	4	18-Jun-07	6	63 Grover Rd (?)	Lightly wooded	Residential	6:00PM	80	2	clear	3	7	Pojani	yes
Ashland	4	18-Jun-07	7	39 Nancy Dr.	Lightly wooded	Residential	6:30PM	77	2	clear	3	6	Pojani	yes
Ashland	4	18-Jun-07	7	15 James Rd.	Heavily wooded	Residential	9:30Pm	68	2	clear	3	10	Pojani	yes
Chelmsford	1	18-Jun-07	14	45 Manning Rd.	Lightly wooded	Residential	8:00PM	72	3	clear	5	5	Begin	yes
Chelmsford	1	18-Jun-07	17	7 Belmont Dr.(?)	Lightly wooded	Residential	6:20PM	77	2	clear	5	8	Begin	yes
Chelmsford	1	18-Jun-07	17	14 Roberts St.	Lightly wooded	Residential	5:30PM	72	3	clear	5	0	Begin	no
Stow	2	19-Jun-07	6	Circuit Dr.	Heavily wooded	Residential	5:20PM	79	0.9	sunny	3	1	Healy	yes
Stow	2	19-Jun-07	3	Gleasondale Rd.	Lightly wooded	Residential	4:15PM	80	0.3	sunny	1	2	Healy	yes
Stow	2	19-Jun-07	2	Crescent st.	Lightly wooded	Residential	3:30PM	80	0.7	warm	2	2	Healy	yes
Littleton	1	19-Jun-07	12	Camp Nashoba	Heavily wooded		8:00PM	74	0.6		10	5	Greite	
Hopkinton	4	19-Jun-07	2	42 Huckleberry Rd.	Heavily wooded	Residential	5PM	80	2	clear	3	8	Pojani	yes
Hopkinton	4	19-Jun-07	2,5	4 Fruit St.	Heavily wooded	Residential	4PM	81	2	clear	3	6	Pojani	yes
Hopkinton	4	19-Jun-07	5	41 Saddle Hill Rd.	Heavily wooded	Residential	5:30PM	80	2	clear	3	10	Pojani	yes
Tewksbury	1	19-Jun-07	21	James Ave/ Woburn St.	Lightly wooded	Residential	8:30PM	72	4	clear	5	6	Begin	yes
Tewksbury	1	19-Jun-07	17	290 Marston St.	Lightly wooded	Residential	9:10PM	70	3	clear	5	7	Begin	yes
Tewksbury	1	19-Jun-07	14	73 Pomfret Rd.	Open	Residential	10:40PM	70	3	clear	5	4	Begin	yes
Natick	4	20-Jun-07	8	7 Westview Rd.	Lightly wooded	Residential	6:30PM	75	2	clear	3	6	Pojani	yes
Acton	2	20-Jun-07	6	Juniper Ridge Rd.	Lightly wooded	Residential	6PM	76.3	0.3	clear	3	2	Greite	yes
Acton	2	20-Jun-07	3	110 Newtown Rd.	Heavily wooded		8:18PM	71.4	0		1	2	Greite	yes
Billerica	1	20-Jun-07	10	17 Millers Farm Rd.	Lightly wooded	Residential	10:30PM	70	4	clear	5	4	Begin	yes
Billerica	1	20-Jun-07	21	77 Rosewood Ave.	Heavily wooded	Residential	9PM	70	2	nice	5	10	Begin	yes
Billerica	1	20-Jun-07	22	14 Todd Ln.	Open	Residential	8:30PM	70	3	nice	5	8	Begin	yes
Natick	4	20-Jun-07	1	9 Oaknoll Rd.	Lightly wooded	Residential	4PM	80	2	clear	3	5	Pojani	yes
Natick	4	20-Jun-07	2	3 Manor Ave.	Lightly wooded	swamp	6PM	75	2	clear	3	8	Pojani	yes
Stow	2	21-Jun-07	6	North Shore Dr.	Heavily wooded	Residential	3:45PM	80.1	1.3	clear	3	1	Healy	yes
Stow	2	21-Jun-07	6	Marlboro Rd.	Heavily wooded		8PM	72.1	0.5		1	2	Greite	yes
Stow	2	21-Jun-07	2	29 Walnut Ridge Rd.	Heavily wooded	Residential	11:45PM	62	0.6	cloudy	3	3	Welch	yes
Stow	2	21-Jun-07	1,2	114 Taylor Rd.	Heavily wooded	Residential	10:40Pm	65	0.5	cloudy	3	3	Welch	yes
Stow	2	21-Jun-07	1	37 Wedgewood Rd.	Heavily wooded	Residential	10PM	65	0.6	cloudy	1	3	Welch	yes
Westford	1	21-Jun-07	16	38 Old Lowell Rd.			7:34	70	0	cloudy	2	2	MacNeil	
Chelmsford	1	21-Jun-07	11	23 Mansfield Dr.	Heavily wooded	Residential	8:15	70	2	overcast	5	8	Begin	yes
Chelmsford	1	21-Jun-07	15	28 Carriage Dr.	Lightly wooded	Residential	7:30Pm	70	3	overcast	5	12	Begin	yes
Chelmsford	1	21-Jun-07	17	Park Rd.	Lightly wooded	Residential	8PM	68	4	overcast	5	7	Begin	yes
Westford	1	22-Jun-07	13	3 Haywagon Rd.	Heavily wooded	Residential	4:20PM	65	0	rainy	2	2	MacNeil	
Chelmsford	1	22-Jun-07	5	71 Spaulding Rd.	Heavily wooded	Residential	4:45Pm	69	0.5	cloudy	5	7	Begin	
Chelmsford	1	22-Jun-07	6	5 Archumbault Way	Lightly wooded	Residential	4PM	69	3	cloudy	5	6	Begin	
Chelmsford	1	22-Jun-07	13	9 Stuart Rd.	Open	Residential	8PM	69	4	overcast	5	4	Begin	
Westford	1	22-Jun-07	18	136 Carlisle Rd.	Swamp	Residential	7:10Pm	65	0		1	6	MacNeil	
Billerica	1	25-Jun-07	5	4 Minton Rd.	Lightly wooded	Residential	8:20PM	74	3	nice	5	3	Begin	yes
Billerica	1	25-Jun-07	5	Cook Rd.	Lightly wooded	Residential	9:30Pm	70	3	nice	5	7	Begin	yes
Billerica	1	25-Jun-07	3	46 Crimson Rd.	Heavily wooded	Residential	8:50PM	70	2	clear	5	8	b	yes
Ashland	4	25-Jun-07	4,9	20 Thurston Ln.	Lightly wooded	Residential	4PM	85	5	clear	3	5	Pojani	yes
Ashland	4	25-Jun-07		11 Lafollette Rd.	Heavily wooded	swamp	5PM	85	6	clear	3	10	Pojani	yes
Ashland	4	25-Jun-07		24 Woodridge Ln.	Heavily wooded	Residential	5:30PM	85	5	clear	3	6	Pojani	yes
Ashland	4	25-Jun-07		6 36 Raymond Way	Swamp	Residential	6PM	80	5	clear	3	12	Pojani	yes
Ashland	4	25-Jun-07		7 40 Tudor Ln.	Swamp	Residential	6:30PM	80	5	clear	3	10	Pojani	yes

2007 Landing Rates

TOWN	DIST	DATE	MAP SECTION	EXACT LOCATION	TYPE OF AREA 1	TYPE OF AREA 2	TIME	TEMP.	WIND	WEATHER IN GENERAL	# MINUTES	# MOSQUITOES	SURVEYED BY	AREA SPRAYED?
Milford	4	25-Jun-07		4 19 Field Pond Rd.	Lightly wooded	Residential	9:15PM	80.4	2		3	6	Briggs	yes
Milford	4	25-Jun-07	4,5,9	181 Highland St.	Lightly wooded	Residential	9:46PM	78.1	2.8		2	4	Briggs	yes
Milford	4	25-Jun-07		1 51 Pine Island Rd.	Heavily wooded	Residential	10:10PM	77.3	2.4	warm	3	6	Briggs	yes
Milford	4	25-Jun-07		1 6 Briar Dr.	Lightly wooded	Residential	3PM	86	2	sunny	5	3	Briggs	yes
Natick	4	27-Jun-07		2 36 Center St.		Residential	11:04PM	79.6	3	cloudy	5	4	Briggs	yes
Acton	2	27-Jun-07		3 Musket Dr.	Lightly wooded	Residential	4Pm	91.6	0.6	humid	2	3	Healy	yes
Sherborn	4	27-Jun-07		1 Lake St.	Heavily wooded	swamp	8:25PM	84	0.6	hazy	1	3	Welch	yes
Sherborn	4	27-Jun-07		9 Towne Lyne Rd.	Swamp	Residential	8:55PM	84	0.7	hazy	2	3	Welch	yes
Sherborn	4	27-Jun-07		2 Ash Ln.	Swamp	Residential	9:30PM	83	0.6	hazy	1	3	Welch	yes
Sherborn	4	28-Jun-07		3 60 Prospect St.	Heavily wooded	Residential	4pm	85	2	clear	3	6	Pojani	yes
Sherborn	4	28-Jun-07	4,8	86 Farm Rd.	Heavily wooded	swamp	5PM	82	3	clear	3	12	Pojani	yes
Sherborn	4	28-Jun-07	4,8	211 Farm Rd.	Heavily wooded	swamp	9PM	75	3	cloudy	3	15	Pojani	yes
Holliston	4	28-Jun-07		11 1070 Washington St.	Lightly wooded	Residential	10:50PM	81.6	2		2	6	Briggs	yes
Holliston	4	28-Jun-07		8 70 Pamela Dr.	Lightly wooded	Residential	9:50PM	85.5	2		5	3	Briggs	yes
Holliston	4	28-Jun-07	2,3	277 Concord St.	Lightly wooded	Residential	9:10PM	86.8	2	clear	3	7	Briggs	yes
Holliston	4	28-Jun-07		1 86 Stoney Brook Dr.	Lightly wooded	Residential	8:44PM	87.4	2	clear	5	4	Briggs	yes
Chelmsford	1	28-Jun-07		4 8 Columbia St.	Lightly wooded	Residential	9:29PM	80	3	clear	5	10	Begin	yes
Chelmsford	1	28-Jun-07		9 73 Bridge St.	Lightly wooded	Residential	8:20PM	80	3	muggy	5	8	Begin	yes
Chelmsford	1	28-Jun-07		5 29 Drexel Dr.	Lightly wooded	Residential	9PM	80	3	nice	5	6	Begin	yes
Milford	4	2-Jul-07		1 10 Fenway Dr.	Lightly wooded	Residential	11PM	64.8	1		4	6	Briggs	yes
Milford	4	2-Jul-07		7 6 East Charles St.	Lightly wooded	Residential	10Pm	65.3	1		7	3	Briggs	yes
Ashland	4	2-Jul-07		5 Haven Way	Heavily wooded	swamp	10PM	58	1	clear	3	8	Pojani	yes
Ashland	4	2-Jul-07		6 47 Donna Ln.	Lightly wooded	Residential	6:30PM	70	3	clear	3	6	Pojani	yes
Ashland	4	2-Jul-07		3 14 Kathryn Dr.	Swamp	Residential	6PM	70	3	clear	3	10	Pojani	yes
Ashland	4	2-Jul-07		4 49 Strobus Ln.	Swamp	Residential	5PM	72	3	clear	3	8	Pojani	yes
Ashland	4	2-Jul-07	1,2	89 Oregon Rd.	Lightly wooded	Residential	4pm	75	3	clear	3	5	Pojani	yes
Lunenburg	2	2-Jul-07		2 Pleasant St.	Lightly wooded	Residential	5:30PM	69.7	1.3	sunny	4	2	Healy	yes
Lunenburg	2	2-Jul-07		9 Burrage St.	Lightly wooded	Residential	4:40PM	70.1	0.8	sunny	1	1	Healy	yes
Lunenburg	2	2-Jul-07		11 The Lane	Lightly wooded	Residential	4:30PM	70.3	0.9	cloudy	2	2	Healy	yes
Lunenburg	2	2-Jul-07		14 Gilcrest St.	Lightly wooded	Residential	4:10PM	70.6	1.3	cloudy	3	2	Healy	yes
Ayer	2	2-Jul-07		2 Pearl St.	Lightly wooded	Residential	3:20PM	71.3	0.5	cloudy	1	2	Healy	yes
Ayer	2	2-Jul-07		8 High St.	Lightly wooded	Residential	3PM	72.1	0.7	cloudy	2	3	Healy	yes
Hopkinton	4	2-Jul-07	7,8	7 E. Main St.	Lightly wooded	Residential	4PM	78	2	cloudy	3	5	Pojani	yes
Hopkinton	4	2-Jul-07		3 5 Tiffany Trail	Heavily wooded	swamp	5:30PM	75	2	clear	3	7	Pojani	yes
Hopkinton	4	2-Jul-07		3 7 Priscilla Rd.	Swamp	Residential	6PM	75	2	clear	3	6	Pojani	yes
Hopkinton	4	2-Jul-07		3 308 W. Main St.	Swamp	Residential	6PM	72	2	clear	3	10	Pojani	yes
Hudson	3	2-Jul-07		9 Lilac Ln.	Heavily wooded	Residential	4PM	74.3	0.2	mild	3	2	Healy	yes
Hudson	3	2-Jul-07		4 Hickory Ln.	Lightly wooded	Residential	5:15PM	73.6	0.4	mild	2	1	Healy	yes
Tewksbury	1	5-Jul-07		2 27 Catamount Rd.	Lightly wooded	Residential	8:30PM	78	3	muggy	5	7	Begin	yes
Tewksbury	1	5-Jul-07		27 Chuckies Way	Lightly wooded	Residential	9:30PM	78	3	muggy	5	4	Begin	yes
Tewksbury	1	5-Jul-07		14 Barbara D. Ln.	Lightly wooded	Residential	10PM`	78	3	muggy	5	4	Begin	yes
Dracut	1	9-Jul-07		7 Cornstalk Rd.			6:15PM	80	3	muggy	5	5	Begin	yes
Dracut	1	9-Jul-07		8 Morris Rd.	Lightly wooded	Residential	5:10PM	82	3	overcast	5	7	Begin	yes
Dracut	1	9-Jul-07		6 29 Avis Ave.	Lightly wooded	Residential	3:55PM	82	3	overcast	5	7	Begin	yes
Tewksbury	1	10-Jul-07		22 Shandel Dr.	Heavily wooded	Residential	4:30PM	83	0.3	muggy	5	7	Begin	yes
Tewksbury	1	10-Jul-07		16 65 Sunnyslope Ave.	Open	Industrial	3:45PM	85	3	muggy	5	6	Begin	yes
Tewksbury	1	10-Jul-07		24 374 Foster Rd.	Swamp	Residential	5:15PM	82	3	muggy	5	4	Begin	yes
Boxboro	2	10-Jul-07	5,6	Depot Rd.	Heavily wooded		8:20PM	71.6	0		1	1	Greite	yes

2007 Landing Rates

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Acton	2	11-Jul-07		2 Duston LN.	Heavily wooded	Residential	4:50PM	84.7	0.8	humid	3	2	Healy	yes
Acton	2	11-Jul-07		4 Emerson Dr.	Lightly wooded	Residential	3PM	86.3	0.9	humid	2	2	Healy	yes
Billerica	1	11-Jul-07		25 147 Nashua Rd.	Heavily wooded	Residential	8:15PM	80	3	muggy	5	7	Begin	yes
Billerica	1	11-Jul-07		24 Harwood Dr.	Lightly wooded	Residential	9:45PM	80	3	overcast	5	6	Begin	yes
Billerica	1	11-Jul-07		10 Blossom Dr.	Lightly wooded	Residential	9:15PM	80	3	muggy	5	5	Begin	yes
Stow	2	12-Jul-07		2 Red Acre Rd.	Heavily wooded	Residential	4:50PM	78.2	1.1	clear	1	2	Healy	yes
Stow	2	12-Jul-07		5 Wildwood Rd.	Lightly wooded	Residential	4:15PM	78.7	0.9	clear	1	3	Healy	yes
Stow	2	12-Jul-07		3 Wheeler Rd.	Lightly wooded	Residential	3PM	80.1	1.2	cl	2	2	Healy	yes
Lancaster	2	12-Jul-07		2 Old Country Turnpike	Heavily wooded		8:23PM	68.6	0.6		1	3	Greite	yes
Chelmsford	1	12-Jul-07		6 25 Locke Rd.	Lightly wooded	Residential	6:30PM	77	3	nice	5	5	Begin	yes
Chelmsford	1	12-Jul-07		12 Harold St.	Lightly wooded	Residential	6PM	78	3	nice	5	4	Begin	yes
Chelmsford	1	12-Jul-07		10 Golden Cove Rd.	Lightly wooded	Residential	4PM	79	3	nice	5	6	Begin	yes
Northbridge	5	18-Jul-07		4 Riverdale Park/Prov. Rd.	Recreational	Lightly Wooded	7:10PM	73	0	overcast	2	7	Nichols	yes
Northbridge	5	18-Jul-07		4 Oliver Ashton Mem. Field	Recreational	Lightly Wooded	7:26PM	73	0	overcast	5	0	Nichols	no
Northbridge	5	18-Jul-07		3 Clubhouse LN.	Open	Residential	7:34PM	73	0	overcast	5	0	Nichols	no
Northbridge	5	18-Jul-07		2 Washington St.	Lightly wooded	Residential	8PM	73	0	overcast	5	0	Nichols	no
Chelmsford	1	18-Jul-07		15 25 Carriage Dr.	Lightly wooded	Residential	7:45PM	75	2	overcast	5	7	Begin	no
Chelmsford	1	18-Jul-07		11 21 Mansfield Dr.	Lightly wooded	Residential	6:30PM	75	2	overcast	5	5	Begin	no
Chelmsford	1	18-Jul-07		11 9 Tadmuck Rd.	Heavily wooded	Residential	6PM	75	2	rainy	5	8	Begin	no
Stow	2	19-Jul-07		4 Heritage Ln.			9:55PM	73.6	1		5	7	Briggs	yes
Stow	2	19-Jul-07		4 51 Sawmill Rd.	Lightly wooded	Residential	4:10PM	75.8	1		1	15	Briggs	yes
Tewksbury	1	19-Jul-07		16 7 Neptune St.	Lightly wooded	Residential	4PM	78	2	overcast	5	5	Begin	
Tewksbury	1	19-Jul-07		24 438 Foster Rd.	Lightly wooded	Residential	6:15PM	75	2	overcast	5	6	Begin	
Tewksbury	1	19-Jul-07		3 6 Cayuga Rd.	Lightly wooded	Residential	4:45PM	78	2	overcast	5	4	Begin	
Hopedale	4	23-Jul-07		6 14 Moore Rd.	Lightly wooded	Residential	3PM	75	2	cloudy	3	6	Pojani	no
Hopedale	4	23-Jul-07		2 6 Malquinn Rd.	Heavily wooded	Residential	3:30PM	72	2	cloudy	3	7	Pojani	no
Ashland	4	23-Jul-07		168 Olive St.	Heavily wooded	Residential	5:30PM	70	2	cloudy	3	10	Pojani	no
Billerica	1	23-Jul-07		16 77 Andover Rd.	Lightly wooded	Residential	3:30PM	78	3	overcast	5	5	Begin	
Billerica	1	23-Jul-07	8a	13 Pearl Rd.	Lightly wooded	Residential	5PM	76	4	overcast	5	6	Begin	
Billerica	1	23-Jul-07		13 16 Springs Rd.	Heavily wooded	Residential	5:45PM	76	4	overcast	5	8	Begin	
Holliston	4	23-Jul-07		1 86 Stoney Brook Dr.	Lightly wooded	Residential	8:47PM	71.2	1		3	5	Briggs	yes
Holliston	4	23-Jul-07		5 141 Marshall St.	Heavily wooded	Residential	9:55PM	70.4	1		3	8	Briggs	yes
Boylston	3	23-Jul-07	four	Green St.	Heavily wooded		8:07PM	72.3	0.5		1	3	Greite	yes
Auburn	5	24-Jul-07		8 South St.		Residential	9:50PM	73	0	clear	5	1	Nichols	NO
Auburn	5	24-Jul-07		1 Kelly St.	Heavily wooded	Residential	9:30PM	73	0	clear	5	2	Nichols	no
Auburn	5	24-Jul-07		1 West St.	Lightly wooded	Industrial	9:15PM	73	0	clear	5	2	Nichols	no
Auburn	5	24-Jul-07		2 Crowe Hill Rd.	Heavily wooded	Residential	8:56PM	73	0	clear	5	0	Nichols	no
Auburn	5	24-Jul-07		3 Chapin Way	Lightly wooded	Residential	8:45PM	73	0	clear	5	3	Nichols	no
Auburn	5	24-Jul-07		4 Bancroft Elementary	Lightly wooded	Residential	7:42PM	74	2	clear	5	0	Nichols	no
Chelmsford	1	24-Jul-07		7 40 Smith St.	Lightly wooded	Residential	4:35Pm	78	3	nice	5	6	Begin	
Chelmsford	1	24-Jul-07		7 Ideal Ave.	Lightly wooded	Residential	4:05PM	78	3	nice	5	5	Begin	
Chelmsford	1	24-Jul-07		11 2 Meadow Crest Ln.	Lightly wooded	Residential	3PM	76	3	nice	5	4	Begin	
Hopkinton	4	24-Jul-07		3 22 Hillcrest Rd.	Heavily wooded	Residential	5:30PM	75	2	clear	3	8	Pojani	yes
Hopkinton	4	24-Jul-07		5 11 Stoney Brook Rd.	Heavily wooded	swamp	4PM	78	3	clear	3	6	Pojani	yes
Hopkinton	4	24-Jul-07	2,5	17 Fruit St.	Swamp	Residential	3PM	80	3	clear	3	7	Pojani	yes
Hopkinton	4	24-Jul-07		2 35 North St.	Swamp	Residential	2PM	80	2	clear	3	6	Pojani	yes
Westford	1	24-Jul-07		18 9 Abby Rd.	Heavily wooded	Residential	5:20PM	76	0.3	warm	3	2	MacNeil	
Westboro	4	25-Jul-07		9 Hopkinton Rd.	Lightly wooded	Industrial	10:27PM	68.2	0.6		2	5	Briggs	yes

2007 Landing Rates

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Westboro	4	25-Jul-07	1	17 Chauncy Cir	Lightly wooded	Residential	9:10PM	79.7	1		2	5	Briggs	yes
Northboro	3	25-Jul-07	13	59 Davis St.	Lightly wooded	Residential	8:40PM	80	1		4	6	Briggs	yes
Billerica	1	25-Jul-07	15	1 Monson St.	Lightly wooded	Residential	3:15	80	3	dry	5	5	Begin	yes
Billerica	1	25-Jul-07	12	109 Dudley Rd.	Lightly wooded	Residential	4:30PM	80	4	muggy	5	6	Begin	yes
Billerica	1	25-Jul-07	19	4 Simmons Farm Rd.	Lightly wooded	Residential	6:15PM	80	3	nice	5	7	Begin	yes
Natick	4	25-Jul-07	9	35 Sylvester Rd.	Heavily wooded	Residential	6PM	79	2	clear	3	8	Pojani	yes
Natick	4	25-Jul-07	2	13 Pamela Rd.	Swamp	Residential	5:30PM	80	2	clear	3	8	Pojani	yes
Natick	4	25-Jul-07	5	8 Parker Ct.	Swamp	Residential	5PM	82	2	clear	3	12	Pojani	yes
Natick	4	25-Jul-07	14	18 Appleridge Rd.	Heavily wooded	Residential	4:30PM	85	3	clear	3	7	Pojani	yes
Natick	4	25-Jul-07	13	27 Eliot Hill Rd.	Heavily wooded	Residential	4PM	85	2	clear	3	5	Pojani	yes
Billerica	1	26-Jul-07	11	18 Staples Rd		Residential	5:05PM	80	3	clear	5	7	Begin	yes
Billerica	1	26-Jul-07	4	16 Fredrickson Rd.	Lightly wooded	Residential	4:15pm	82	3	clear	5	5	Begin	yes
Billerica	1	26-Jul-07	11	18 Patten Rd.	Lightly wooded	Residential	6:55PM	80	3	clear	5	4	Begin	yes
Sherborn	4	26-Jul-07	4	54 Everett St.	Lightly wooded	Residential	8:35pm	77	1		4	7	Briggs	yes
Sherborn	4	26-Jul-07	13	30 Bogastow Brook Rd.	Lightly wooded	Residential	9:20PM	75.2	1		2	6	Briggs	yes
Hopkinton	4	26-Jul-07	7	7 Prestwick Dr.	Lightly wooded	Residential	10:25PM	73.7	2		3	5	Briggs	yes
Stow	3	26-Jul-07	3	Hudson Rd.	Lightly wooded	Residential	2:15PM	90.3	0.9	humid	1	3	Healy	yes
Stow	3	26-Jul-07	4	Timberedge Rd.	Heavily wooded	Residential	2:45PM	90.2	.6	humid	4	2	Healy	yes
Stow	3	26-Jul-07	6	Boon Rd.	Lightly wooded	Residential	3:20PM	90	0.4	humid	2	2	Healy	yes
Stow	3	26-Jul-07	5	Sudbury Rd.	Lightly wooded	Residential	4:15PM	90.1	0.3	humid	1	1	Healy	yes
Chelmsford	1	26-Jul-07	12	Hildreth St.	Swamp	Residential	3:55PM	82	3	muggy	5	7	Begin	yes
Chelmsford	1	26-Jul-07	10	23 Glen Ave	Swamp	Industrial	4:15 PM		3	muggy	5	5	Begin	yes
Chelmsford	1	26-Jul-07	8	60 Pine Hill Rd.	Lightly wooded	Residential	5:45PM	80	3	muggy	5	6	Begin	yes
Millville	1	26-Jul-07	1		Lightly wooded	open	6:50PM	80	0	humid	2	3	Nichols	no
Holliston	4	31-Jul-07	12	406 Norfolk St.	Heavily wooded	Residential	8:50PM	75.3	1		5	3	Briggs	yes
Holliston	4	31-Jul-07	6	Holliston High School	Open		9:45PM	74.2	1		15	6	Briggs	no
Holliston	4	31-Jul-07	11	135 Winthrop St.	Lightly wooded	Residential	9:22 PM	74.9	1		3	7	Briggs	yes
Holliston	4	31-Jul-07	7	180 Fiske St.	Swamp	Residential	9:13PM	74.5	1		3	8	Briggs	yes
Tewksbury	1	31-Jul-07	26	65 Arlington St.	Swamp	Residential	5:15PM	80	3	clear	5	4	Begin	yes
Tewksbury	1	31-Jul-07	14	71 Serenity Dr.	Swamp	Residential	4:45PM	80	3	clear	5	4	Begin	yes
Tewksbury	1	31-Jul-07	6	6 Neptune St.	Swamp	Residential	3:35PM	82	3	muggy	5	5	Begin	yes
Hopkinton	4	31-Jul-07	5	8 Meserve St.	Lightly wooded	Residential	4:30PM	85	2	clear	3	6	Pojani	yes
Hopkinton	4	31-Jul-07	1	192 Spring St.	Swamp	Residential	4PM	87	2	clear	3	10	Pojani	yes
Hopkinton	4	31-Jul-07	2	23 Huckleberry Rd.	Swamp	Residential	3:30PM	88	2	clear	3	6	Pojani	yes
Hopkinton	4	31-Jul-07	3	22 Hillcrest Rd.	Swamp	Residential	6PM	80	2	clear	3	8	Pojani	yes
Westford	1	31-Jul-07	8	85 Forge Village Rd.	Heavily wooded	Residential	8:52PM	74	0		3	5	MacNeil	yes
Billerica	1	1-Aug-07	19	281 Rangeway Rd.	Swamp	Residential	3:29PM	81	3	clear	5	5	Begin	yes
Billerica	1	1-Aug-07	10	1 Harrington Rd.	Lightly wooded	Residential	6PM	80	3	clear	5	6	Begin	yes
Billerica	1	1-Aug-07	13	316 Nashua Rd.	Lightly wooded	Residential	4:05PM	82	3	clear	5	4	Begin	yes
Chelmsford	1	2-Aug-07	3	28 Holt St.	Lightly wooded	Residential	5:00PM	87	3	humid	5	8	Begin	yes
Chelmsford	1	2-Aug-07	3	39 Acton Rd.	Lightly wooded	Residential	4:00PM	87	3	humid	5	3	Begin	yes
Chelmsford	1	2-Aug-07	14	3 Manning Rd.	Lightly wooded	Industrial	3:30Pm	87	3	humid	5	4	Begin	yes
Tewksbury	1	2-Aug-07	8	86 Trull Rd.	Heavily wooded		8:20PM	82.5	0	warm	3	3	MacNeil	yes
Marlboro	3	3-Aug-07		Locke Dr/Verizon	Heavily wooded	Industrial	9:59PM	70.2	0.8		5	0	Deschamps	no
Marlboro	3	3-Aug-07		33 Locke Dr.	Lightly wooded	Residential	9:52PM	71.8	0.2	thunderstorm	5	0	Deschamps	no
Marlboro	3	3-Aug-07		Muddy Ln.	Heavily wooded		9:39PM	68.3	3-12		5	0	Deschamps	no
Millville	5	6-Aug-07		Oak St.	Heavily wooded	Residential	9:00 PM	78.3	.5		10	0	Swinerton	no
Millville	5	1-Aug-07		Ash St.	Heavily wooded	Residential	8:40 PM	75.5	.5	clear	10	0	Swinerton	no

2007 Landing Rates

TOWN	DIST	DATE	MAP SECTION	EXACT LOCATION	TYPE OF AREA 1	TYPE OF AREA 2	TIME	TEMP.	WIND	WEATHER IN GENERAL	# MINUTES	# MOSQUITOES	SURVEYED BY	AREA SPRAYED?
Tewksbury	1	6-Aug-07	20	6 Tanglewood Ave.	Heavily wooded	Residential	7:15 PM	80 3		overcast	5	7	Begin	yes
Tewksbury	1	6-Aug-07	13	50 Starr Ave.	Lightly wooded	Residential	4:30 PM	80 3		muggy	5	3	Begin	yes
Tewksbury	1	6-Aug-07	16	7 Neptune St.	Lightly wooded	Residential	3:00 PM	80 3		muggy	5	5	Begin	yes
Billerica	1	7-Aug-07	9	25 Poe Rd.	Lightly wooded	Residential	3:00 PM	81 3		muggy	5	4	Begin	yes
Billerica	1	7-Aug-07	13	205 Concord Rd.	Lightly wooded	Residential	5:12 PM	79 3		muggy	5	7	Begin	yes
Billerica	1	7-Aug-07	15	Innis Dr.	Open	Industrial	6:30 PM	78 3		muggy	5	7	Begin	no
Chelmsford	1	8-Aug-07	1	Doris Dr.	Lightly wooded	Residential	5:30 PM	80 3		muggy	5	5	Begin	no
Chelmsford	1	8-Aug-07	14	27 Robert Bigelow Rd.	Lightly wooded	Residential	4:30PM	82 2		muggy	5	4	Begin	yes
Chelmsford	1	8-Aug-07	8	25 Galloway Rd.	Lightly wooded	Residential	3:10Pm	82 3		humid	5	7	Begin	yes
Westford	1	9-Aug-07	2	148 Dunstable Rd.	Heavily wooded	Residential	9:20 PM	69 0			3	3	MacNeil	yes
Westford	1	9-Aug-07	1	Wright Ln.	Heavily wooded	Residential	8:25PM	70 0			3	3	MacNeil	yes
Westford	1	9-Aug-07	6	Brookside Rd.	Heavily wooded	Industrial	7:00 PM	69 0			3	5	MacNeil	no
Tewksbury	1	9-Aug-07	15	25 Watertower Rd.	Heavily wooded	Residential	6:00 PM	78 3`		calm	5	8	Begin	yes
Tewksbury	1	9-Aug-07	13	1087 Shawsheen St.	Lightly wooded	Residential	5:00 PM	78 3		calm	5	7	Begin	yes
Tewksbury	1	9-Aug-07	9	Sheridan Ln.	Open	Residential	4:00 PM	78 3		calm	5	3	Begin	yes
Tewksbury	1	21-Aug-07	5	100 Judique Rd.	Heavily wooded	Residential	3:35 PM	78 3		calm	5	4	Begin	yes
Tewksbury	1	21-Aug-07	15	212 Astle St.	Lightly wooded	Residential	4:50 PM	78 3		clear	5`	5	Begin	yes
Tewksbury	1	21-Aug-07	22	314 Shawsheen St.	Open	Residential	3:00 PM	78 3		clear	5	4	Begin	yes
Dracut	1	20-Aug-07	7	131 Ruby Rd.	Recreational	Residential	3:30PM	78 3		nice	5	4	Begin	yes
Dracut	1	20-Aug-07	10	Carol St.	Lightly wooded	Residential	6:10 PM	76 3		nice	5	7	Begin	yes
Dracut	1	20-Aug-07	7	22 Montaup Ave.	Open	Residential	3:05PM	78 3		nice	5	3	Begin	yes

TOWN	DATE	DIST	MAP SECTION	EXACT LOCATION
Dracut	27-May-08	1	6	Betty Ann Ln. #'s 110 & 118
Dracut	27-May-08	1	7	Loon Hill Rd. opp. pole #15
Billerica	27-May-08	1	12,19	Gilman Rd.
Billerica	27-May-08	1	4	Pole #68 Shawsheen Rd.
Billerica	27-May-08	1	23	Corner of Salem Rd. & Floyd St.
Westboro	27-May-08	4	9	Pine Grove Cemetery
Westboro	27-May-08	4	2	11 Smith St.
Westboro	27-May-08	4	5	Rogers Field
Northboro	27-May-08	3	1	8 Smith Rd.
Northboro	27-May-08	3	2	7 Patrick Dr.
Millville	27-May-08	5	2,3	285 Chestnut Hill Rd.
Millville	27-May-08	5	3	137 Lincoln St
Blackstone	27-May-08	5	2	184 Mendon St.
Blackstone	27-May-08	5		Valati Park, Summer St.
Dracut	27-May-08	1	10	Autumn Rd, behind house 94
Dracut	27-May-08	2	9	Wheeler Rd at pole #18
Dracut	27-May-08	2	9	Poppy Ln. house #4
Chelmsford	28-May-08	1	10	Emerson Ave. Colonial Oil Co.
Chelmsford	28-May-08	1	11	1 Tadmuck Rd.
Holliston	28-May-08	4	1	801 Winter St.
Holliston	28-May-08	4	11	Lake Grove Cemetery
Acton	28-May-08	2	3	Main St. #130
Holliston	28-May-08	4	4,5	142 Hanlon Rd.
Holliston	28-May-08	4	3	107 Mohawk Path
Hudson	28-May-08	3	7,8	Parmenter Rd, house #58
Westford	28-May-08	1	17	4 Trail Side Way
Westford	28-May-08	1	17	9 Sherlock Ln
Acton	28-May-08	2	3	18 Coolidge Dr.
Acton	28-May-08	2	6	Central St, Hope Cemetery
Marlboro	28-May-08	3		Broad Meadow Rd - Park
Shrewsbury	28-May-08	3	6	South St at Floral St.
Shrewsbury	28-May-08	3	11	Westbrook Crossing at Main St.
Westford	28-May-08	1	8	Access Rd. behind 40 W. Prescott St.
Westford	28-May-08	1	8	Behind 18 Bridge St.
Wilmington	29-May-08	1	7	18 Chapman Ave, backyard
Wilmington	29-May-08	1	8	157 Federal St.
Natick	29-May-08	4	2	11 Stratford Rd.
Natick	29-May-08	4	2	47 Felch Rd.
Natick	29-May-08	4	2	3 Manor Ave.
Natick	29-May-08	4	10	13 Rockland St.
Stow	29-May-08	2	3	
Stow	29-May-08	2	6	109 Kingland Rd.
Stow	29-May-08	2	6	5 Fox Ct.
Stow	29-May-08	2	6	25 Woodland Way
Stow	29-May-08	2	6	Pine Point Rd/Sudbury Rd.
Tewksbury	29-May-08	1	19	Pleasant St. T.H.S.
Tewksbury	29-May-08	1	23	Whipple Rd./behind DPW
Billerica	1-Jun-08	1	13	8 Satucruett Ln.
Northboro	1-Jun-08	3	1	15 Smith Rd.
Billerica	1-Jun-08	1	2	315 Salem Rd.
Billerica	1-Jun-08	1	16	corner of Tower Farm Rd and Boston R.

Dracut	1-Jun-08	1	10	415 Pelham Rd.
Ashland	1-Jun-08	4	8	65 Howe St.
Ashland	1-Jun-08	4	7	15 James Rd.
Milford	1-Jun-08	4	18	46 S. Central St.
Hopedale	1-Jun-08	4	6	Hopedale Village Cemetery
Berlin	1-Jun-08	3	1	Pleasant St. Cemetary
Milford	1-Jun-08	4		353 purchase St.
Milford	1-Jun-08	4		Governor's Way
Lunenburg	1-Jun-08	1		Goodrich St. # 364
Westford	3-Jun-08	1	13	20 Chippewa Rd.
Boxboro	3-Jun-08	2	3	Burroughs Rd #801
Holliston	3-Jun-08	4	5	Marshall St. Soccer Fields
Holliston	3-Jun-08	4	3	49 Windsor Dr.
Boylston	3-Jun-08	3	4	3 Oak Hill Ln.
Chelmsford	3-Jun-08	1	8	5 Sheehan Ln.
Chelmsford	3-Jun-08	1	17	Mill Rd. Soccer field
Hudson	3-Jun-08	3	3	Wilkins St. Gun Club
Westford	3-Jun-08	1	12	87 Providence Rd.
Westford	3-Jun-08	1	12	Blakes Hill Rd. corner of Boston Rd.
Hopkinton	3-Jun-08	4	2	24 Huckleberry Rd
Hopkinton	3-Jun-08	4		Old Elm Way
Hopkinton	3-Jun-08	4		32 Falcoln Ridge Rd
Marlboro	11-Jun-08	3	1	10 Douchette Dr.
Marlboro	11-Jun-08	3	5,11	701 Concord Rd.
Acton	11-Jun-08	2	1	Wyndcliff Dr.
Westboro	11-Jun-08	4	2	10A Walker St.
Westboro	11-Jun-08	4		Rogers Rd: Rogers Ballfields
Natick	11-Jun-08	4	4	120 Hartford Rd.
Billerica	11-Jun-08	1	23	100 Iron Horse Park Rd.
Billerica	11-Jun-08	1	24	end of Corthell Rd.
Stow	12-Jun-08	2	3	22 Elizabeth Dr.
Stow	12-Jun-08	2		12 Seven Star Ln.
Chelmsford	12-Jun-08	1	16	9 Topeka Rd.
Chelmsford	12-Jun-08	1	17	Soccer field on Mill Rd.
Lancaster	12-Jun-08	1	1	Packard St.
Sherborn	12-Jun-08	4	1,2,5	210 Western Ave.
Dracut	13-Jun-08	1	10	631 Pelham St.
Dracut	16-Jun-08		1	36 Poppy Ln.
Tewksbury	16-Jun-08	1	17	McNeil Way #23
Tewksbury	16-Jun-08	1	14	110 Bridge St.
Ashland	16-Jun-08	4	6	56 Donna Lee Ln.
Westford	17-Jun-08	1	6	7 Bobolink Rd.
Westford	17-Jun-08	1	14	39 Magnolia Dr.
Westford	17-Jun-08	1	18	18 Jefferson Rd.
Billerica	17-Jun-08	1	19	19 Coach Rd.
Billerica	17-Jun-08	1	16	Boston Rd & Heritage Rd.
Hopkinton	17-Jun-08	4	5	Fruit St. - sandpit
Hopkinton	17-Jun-08	4	5	205 Saddle Hill Rd.
Hopkinton	17-Jun-08	4	7,8	66 Ash St.
Natick	18-Jun-08	4	3	62 Winter St.
Westboro	18-Jun-08	4	5	Rogers Ballfields
Westboro	18-Jun-08	4	5	55 Flanders Rd.

Chelmsford	18-Jun-08	1	1	2 Oak Hill Rd.
Chelmsford	18-Jun-08	1	14	Canal St. pole # 111/10
Sherborn	19-Jun-08	4	5	211 Farm Rd.
Sherborn	19-Jun-08	4	7	28 Deerfield Rd.
Milford	19-Jun-08	4	1	355 Purchase St.
Tewksbury	19-Jun-08	1	10	Power Company Rd. under power lines
Tewksbury	19-Jun-08	1	14	South St. Tewks. Elks Club
Southboro	19-Jun-08	3	2	9 Johnson Rd.
Dracut	20-Jun-08	1	3	225 Patricia Rd.
Hopedale	23-Jun-08	4	2	1 Rain St.
Billerica	23-Jun-08	1	24	Pond St/ Rod & Gun Club
Billerica	23-Jun-08	1	26	12 Meadowglen Rd.
Ashland	23-Jun-08	4	1	224 Cordaville Rd.
Ashland	23-Jun-08	4	8	65 Howe St.
Ashland	23-Jun-08	4	5,9	168 Olive St.
Milford	23-Jun-08	4	1	Silver Hills Condo Village Cir.
Milford	23-Jun-08	4	17	Howard St.
Chelmsford	24-Jun-08	1	11	133 Robin Hill Rd. Chelms. Swim and te
Chelmsford	24-Jun-08	1	14	18 Pleasant Ave.
Hopkinton	24-Jun-08	4	5	34 Proctor St.
Hopkinton	24-Jun-08	4	1,3	221 Pond St.
Hopkinton	24-Jun-08	4	3	22 W. Elm St.
Hopkinton	24-Jun-08	4		8 Meserve St.
Shrewsbury	24-Jun-08	3	12	41 Westview Ave.
Holliston	24-Jun-08	4	1	801 Winter St.
Acton	25-Jun-08	2	1	Wyndcliff Dr.
Natick	25-Jun-08	4	5	19 Lake St.
Natick	25-Jun-08	4	2	5 Manor Ave.
Westboro	25-Jun-08	4	5	Butterfield Dr.
Westboro	25-Jun-08	4	4	1 Park St.
Hopkinton	26-Jun-08	4	7	5 Cold Spring Brook Rd.
Sherborn	26-Jun-08	4	8	32 Cider Hill Ln
Sherborn	26-Jun-08	4	2	3 Wildwood Dr.
Sherborn	26-Jun-08	4	5	10 Pleasant St.
Sturbridge	26-Jun-08	5	3	St. Anne's church st.
Billerica	26-Jun-08	1	9	35 Handel Rd.
Billerica	26-Jun-08	1	24	7 Carmel Dr.
Stow	26-Jun-08	2	5,6	Wildwood Rd.
Stow	26-Jun-08	2	5,6	547 Sudbury Rd.
Stow	26-Jun-08	2	2	25 Red Acre Rd.
Stow	26-Jun-08	2	3	36 Sandy Brook Rd.
Southboro	26-Jun-08	3	3	Lynbrook Rd. - end of street
Tewksbury	28-Jun-08	1	16	6 Neptune St.
Tewksbury	28-Jun-08	1	27	354 South St.
Dracut	30-Jun-08	1	5	265 New Boston Rd.
Dracut	30-Jun-08	1	10	4 Eliot St.
Billerica	30-Jun-08	1	4	12 Shaloo Rd.
Billerica	30-Jun-08	1	4	8 Lampson Ln.
Ashland	30-Jun-08	4	9	101 Woodland St.
Ashland	30-Jun-08	4	7	11 Mulhill Dr.
Ashland	30-Jun-08	4	8	29 Cross St.
Ayer	30-Jun-08	2	8	15 Highland Ave.

Ayer	30-Jun-08	2	1	11 Isaac Ln.
Holliston	1-Jul-08	4	9	616 Gorwin Dr.
Chelmsford	1-Jul-08	1	16	10 Larssen Cir.
Chelmsford	1-Jul-08	1	15	4 Coach Rd.
Holliston	1-Jul-08	4	1	86 Stony Brook Dr.
Natick	2-Jul-08	4	4	182 Speen St.
Natick	2-Jul-08	4	6	66 Bacon St.
Chelmsford	7-Jul-08	1	11	Littleton Rd. #215
Chelmsford	7-Jul-08	1	2	end of Wotton St.
Hopedale	7-Jul-08	4	6	3 Tillotson Rd.
Milford	7-Jul-08	4	1	58 Pine Island Rd.
Milford	7-Jul-08	4	13	Birch Hill Condo's, Birch St.
Ashland	7-Jul-08	4	7	43 Nancy Dr.
Ashland	7-Jul-08	4	7	15 James Rd.
Ashland	7-Jul-08	4	7	32 Lakeside Dr.
Hopkinton	8-Jul-08	4	4	3 Alexander Rd.
Hopkinton	8-Jul-08	4	5	11 Wedgewood Dr.
Holliston	8-Jul-08	4	4	191 Adams St.
Holliston	8-Jul-08	4	2	214 Ashland St.
Natick	9-Jul-08	4	4	6 Wildwood Pl.
Natick	9-Jul-08	4		10 Pamela Rd.
Holliston	10-Jul-08	4	6,9,10	425 Underwood St.
Sherborn	10-Jul-08	4	2	9 Rosebay Dr.
Sherborn	10-Jul-08	4	5	30 Dopping Brook Rd.
Ashland	14-Jul-08	4	6	9 Rosebay Dr.
Ashland	14-Jul-08	4	6	MBTA Station
Ashland	14-Jul-08	4	1	94 Heritage Way
Ashland	14-Jul-08	4	1	224 Cordaville Rd.
Holliston	15-Jul-08	4	11	237 Hill St.
Hopkinton	15-Jul-08	4	2	10 North St.
Hopkinton	15-Jul-08	4	2,5	61 Fruit St.

TYPE OF AREA 1	TYPE OF AREA 2	TIME	TEMP.
Residential	Lightly Wooded	8:00pm	71.3 F
Residential	Heavily Wooded	7:40pm	70.5 F
Heavily Wooded		8:00pm	76.5 F
Swamp		8:00pm	70 F
Lightly Wooded		7:30pm	74 F
Open		8:12pm	70.7 F
Residential	Open	9:17pm	67.1 F
Recreational	Swamp, Open	10:46pm	59.9 F
Heavily Wooded		7:30pm	72 F
		9:45pm	65 F
Residential	Heavily Wooded	9:25pm	70 F
Industrial	Heavily Wooded	8:20pm	70 F
Residential		6:00pm	76 F
Recreational	Lightly Wooded	7:30pm	72 F
Residential	Heavily Wooded	4:11pm	74.3 F
Residential	Lightly Wooded	4:23pm	74.1 F
Residential	Lightly Wooded	5:40pm	73.7 F
Industrial	Lightly Wooded	7:00pm	66 F
Residential		4:45pm	73 F
Residential	Heavily Wooded	8:25pm	56.8 F
Lightly Wooded		7:11pm	63.5 F
Heavily Wooded		6:50pm	67.1 F
Residential	Swamp, Heavily Wooded	9:30pm	54 F
Residential	Lightly Wooded	6:30pm	71 F
Residential	Heavily Wooded	7:35pm	63 F
Residential	Open	8:10pm	64 F
Residential	Heavily Wooded	4:10pm	64 F
Residential	Heavily Wooded	2:30pm	68.2 F
Residential	Heavily Wooded	5:45pm	67.6 F
Recreational	Swamp, Heavily Wooded	7:30pm	63 F
Residential	Lightly Wooded	9:50pm	51.4 F
Residential		8:05pm	60 F
Residential	Swamp, Heavily Wooded	7:30pm	59.5 F
Residential	Heavily Wooded	7:50pm	62.3 F
Residential	Lightly Wooded	6:30pm	73.8 F
Residential	Heavily Wooded	7:10pm	72 F
Residential	Lightly Wooded	8:30pm	74 F
Residential	Swamp, Heavily Wooded	9:15pm	72 F
Residential	Open	10:16pm	68 F
Residential	Heavily Wooded	4:41pm	76.3 F
Heavily Wooded		8:05pm	71.1 F
Residential	Heavily Wooded	2:15pm	77.6 F
Residential	Lightly Wooded	3:05pm	77.3 F
Residential	Lightly Wooded	5:00pm	76.1 F
Residential	Heavily Wooded	8:02pm	70 F
Recreational	Heavily Wooded	7:45pm	75 F
Industrial	Heavily Wooded	7:15pm	73 F
Residential	Lightly Wooded	6:20pm	73.1 F
Heavily Wooded		8:00pm	74 F
Residential		5:30pm	78 F
Industrial	Open	7:55pm	75 F

Residential	Heavily Wooded	7:10pm	69.5 F
Residential	Swamp, Heavily Wooded	4:00pm	81 F
Residential	Swamp, Heavily Wooded	6:30pm	75 F
Residential	Lightly Wooded	5:30pm	74 F
Open	Lightly Wooded	7:47pm	63 F
Lightly Wooded		8:05pm	69 F
Residential	Lightly Wooded	8:35pm	70.1 F
Residential	Open	10:40pm	60.8 F
Heavily Wooded		8:02pm	67.4 F
Residential	Heavily Wooded	6:22pm	79 F
Heavily Wooded		8:02pm	74.7 F
Recreational	Open	8:28pm	73.2 F
Residential	Heavily Wooded	10:38pm	69.1 F
Residential	Heavily Wooded	8:00pm	76 F
Residential	Lightly Wooded	6:10pm	78 F
Recreational		7:20pm	76.5 F
Recreational	Lightly Wooded	7:40pm	78 F
Residential	Heavily Wooded	7:30pm	73.2 F
Residential	Heavily Wooded	10:50pm	69.8 F
Residential	Open	8:30pm	73 F
Residential	Lightly Wooded	5:15pm	82 F
Residential	Swamp, Heavily Wooded	4:30pm	83 F
Residential	Lightly Wooded	3:10pm	80.3 F
Residential	Lightly Wooded	5:45pm	79.5 F
Heavily Wooded		8:12pm	73.3 F
Residential	Heavily Wooded	10:38pm	75.5 F
Recreational	Swamp, Open	8:22pm	77.8 F
Residential	Lightly Wooded	8:30pm	71 F
Industrial	Lightly Wooded	7:15pm	79.5 F
Residential	Lightly Wooded	7:00pm	80.5 F
Residential	Heavily Wooded	3:40pm	82.3 F
Residential	Heavily Wooded	5:53pm	80.1 F
Residential	Lightly Wooded	6:00pm	85.5 F
Recreational	Open, Lightly Wooded	7:45pm	83 F
Heavily Wooded		8:14pm	67.1 F
Residential	Lightly Wooded	4:00pm	81 F
Residential	Heavily Wooded	8:15pm	69.3 F
Residential	Heavily Wooded	8:00pm	72 F
Residential	Lightly Wooded	7:55pm	71.5 F
Residential	Heavily Wooded	4:35pm	72.5 F
Residential	Lightly Wooded	4:30pm	70 F
Residential	Heavily Wooded	7:20pm	68.9 F
Residential	Heavily Wooded	6:30pm	62.7 F
Residential	Lightly Wooded	3:00pm	72.4 F
Residential	Lightly Wooded	7:05pm	71.5 F
Residential	Industrial	8:10pm	69.5 F
Recreational	Swamp, lightly wooded	8:30pm	70 F
Residential	Lightly Wooded	3:00pm	78 F
Residential	Heavily Wooded	5:30pm	76 F
Residential	Swamp, Heavily Wooded	3:30pm	74 F
Recreational	Swamp, Open	10:45pm	58.6 F
Residential	Heavily Wooded	10:08pm	61.2 F

Residential	Swamp, lightly wooded	8:10pm	67.5 F
Lightly Wooded	Swamp	7:15pm	69.5 F
Residential	Swamp, Heavily Wooded	3:00pm	74 F
Residential	Swamp, Heavily Wooded	5:00pm	70 F
Residential	Lightly Wooded	8:42pm	64.1 F
Industrial	Open	7:25pm	76 F
Recreational	Heavily Wooded	5:05pm	77 F
Residential	Heavily Wooded	8:15pm	63 F
Residential	Heavily Wooded	8:10pm	69 F
Residential	Lightly Wooded	5:18pm	82 F
Recreational	Swamp	5:30pm	71.5 F
Residential	Swamp	7:00pm	70 F
Residential	Swamp, Heavily Wooded	5:00pm	70 F
Residential	Swamp, Heavily Wooded	3:30pm	76 F
Residential	Heavily Wooded	8:30pm	67 F
Residential	Lightly Wooded	10:33pm	67.7 F
Residential	Lightly Wooded	8:42pm	70.4 F
Residential		4:33pm	82 F
Residential	Lightly Wooded	3:00pm	81 F
Residential	Swamp, Heavily Wooded	8:30pm	67 F
Residential	Swamp, Heavily Wooded	10:45pm	60 F
Residential	Swamp, Heavily Wooded	9:30pm	60 F
Residential	Lightly Wooded	9:30pm	63 F
Residential		7:45pm	67.3 F
Residential	Heavily Wooded	8:34pm	67.1 F
Heavily Wooded		8:28pm	73 F
Residential	Swamp, lightly wooded	8:30pm	70 F
Residential	Swamp, lightly wooded	5:00pm	78 F
Residential	Lightly Wooded	10:39pm	67.6 F
Residential	Lightly Wooded	8:42pm	73.2 F
Residential	Swamp, Heavily Wooded	2:00pm	80 F
Residential	Swamp, lightly wooded	3:30pm	78 F
Residential	Swamp, Heavily Wooded	5:00pm	79 F
Residential	Swamp, Heavily Wooded	8:30pm	69 F
Residential	Heavily Wooded	8:10pm	70 F
Residential	Lightly Wooded	6:50pm	70 F
Residential	Lightly Wooded	3:15pm	74 F
Residential	Lightly Wooded	9:28pm	68.4 F
Residential	Lightly Wooded	8:42pm	71.8 F
Residential	Heavily Wooded	2:45pm	76.6 F
Residential	Heavily Wooded	6:10pm	74.3 F
Heavily Wooded		6:30pm	71.1 F
Residential	Swamp	2:55pm	77.5 F
Residential	Swamp, lightly wooded	7:10pm	72 F
Residential	Heavily Wooded	7:25pm	77 F
Residential	Heavily Wooded	8:25pm	71 F
Residential	Lightly Wooded	3:40pm	77 F
Residential	Lightly Wooded	5:55pm	86 F
Residential	Swamp, Heavily Wooded	8:45pm	71 F
Residential	Swamp, Heavily Wooded	9:30pm	68 F
Residential	Swamp, Heavily Wooded	3:00pm	78 F
Residential	Lightly Wooded	3:30pm	84.2 F

Residential	Heavily Wooded	4:06pm	83.3 F
Residential	Light/heavily wooded	9:47pm	73.4 F
Residential	Lightly Wooded	6:35pm	85.5 F
Residential	Lightly Wooded	3:20pm	86.5 F
Residential	Lightly Wooded	8:37pm	75.2 F
Residential	Lightly Wooded	8:51pm	72.8 F
Residential	Lightly Wooded	10:07pm	69.3 F
Residential	Open	6:55pm	87.5 F
Residential	Lightly Wooded	8:05pm	80 F
Residential	Open	8:47pm	79 F
Residential	Heavily Wooded	10:16pm	73.4 F
Residential	Lightly Wooded	10:39pm	74.7 F
Residential	Lightly Wooded	8:30pm	78 F
Residential	Swamp, Heavily Wooded	9:00pm	78 F
Residential	Swamp, lightly wooded	9:30pm	77 F
Residential	Swamp, Heavily Wooded	9:30pm	77 F
Residential	Swamp, Heavily Wooded	8:30pm	78 F
Residential	Lightly Wooded	8:46pm	76.7 F
Residential	Lightly Wooded	9:43pm	78.1 F
Residential	Swamp, Heavily Wooded	8:30pm	78 F
Residential	Swamp, lightly wooded	9:00pm	77 F
Residential	Swamp, Heavily Wooded	3:00pm	82 F
Residential	Swamp, Heavily Wooded	9:15pm	72 F
Residential	Swamp, Heavily Wooded	8:30pm	72 F
Residential	Lightly Wooded	9:45pm	72 F
Industrial	Swamp, Heavily Wooded	8:00pm	78 F
Residential	Swamp, Heavily Wooded	9:00pm	73 F
Residential	Swamp, lightly wooded	8:30pm	75 F
Residential	Swamp, lightly wooded	8:27pm	73.3 F
Residential	Lightly Wooded	8:30pm	77 F
Residential	Swamp, Heavily Wooded	8:00pm	78 F

WIND	WEATHER IN GENERAL	# MINUTES	# MOSQUITOES	SURVEYED BY
3-4mph gusts to 9	Overcast, windy & rainy	1	2	MacNeil
0-.5mph	Overcast, windy & rainy	1	3	MacNeil
0mph		1	3	Greite
1mph	Muggy, overcast	2	4	Begin
3mph	T-Storm in area warm/muggy	2	3	Begin
1.7mph	Warm/Partly Cloudy	2	10	Briggs
2.2/4.7mph		5	6	Briggs
2.7/6.3mph	Cool and clear skys	10	3	Briggs
1.5mph	Warm, humid, rain on and off	2	2	St. Germain
5mph	cooling down	3	10	St. Germain
calm	clearing, just rained	5	0	Nichols
calm	clearing, just rained	1	10+	Nichols
0mph	cloudy	3	5	Pojani
0mph	cloudy	3	7	Pojani
1.6mph	Sunny and Humid	5	2	Healy
1mph	Sunny and Humid	6	1	Healy
0.2mph	Sunny and Humid	4	2	Healy
3.5mph	Dry, cool, clear	5	4	Begin
4mph	Dry, cool, clear	2	6	Begin
0.6mph		5	10	Briggs
1.2mph		3	8	Briggs
0mph		3	4	Greite
2mph	clear	3	12	Pojani
3mph	clear	3	5	Pojani
0-5mph	clear and cool	5	2	Swinerton
calm	clear	4	12	Nichols
4mph	clear, sunny, light breeze	5	7	Nichols
0mph	sunny and cool	6	1	Healy
2mph	sunny and cool	5	3	Healy
0-5mph	clear	5	2	Allard
1mph	cool	0	10	St. Germain
0mph	cool	0	10	St. Germain
0-0.5mph	Sunny	1	5	MacNeil
0mph	sunny	1	6	MacNeil
1-4mph	sunny, breezy	1	3	MacNeil
0-2mph	sunny, breezy	1	6	MacNeil
2mph	clear	3	6	Pojani
	clear	3	10	Pojani
2.4mph	warm, clear			Briggs
2.5mph	Sunny, warm	5	10	Briggs
0mph		5	2	Greite
3.4mph	Sunny, warm	6	1	Healy
6.9mph	Sunny, warm	4	1	Healy
1.4mph	Sunny, warm	10	2	Healy
calm	Clear, pleasant	1	12	Nichols
1.5-3.5mph	dry, clear	5	6	Begin
3.5mph	dry, clear	5	5	Begin
3.5mph	Sunny, warm	6	2	Healy
1mph	Nice	2	4	St. Germain
3mph	nice warm day	5	6	Begin
3mph	dry, warm, clear	5	4	Begin

0-1.2mph		1	3	MacNeil
1mph	clear	2	20	Pojani
1mph	clear	3	6	Pojani
calm	clear, warm	5	4	Nichols
calm	clear, sun	10	0	Nichols
0-5mph	clear	5	3	Allard
.6mph	warm, clear	3	9	Briggs
0.2mph		10	3	Briggs
0mph		1	5	Greite
1.8mph	Sunny, warm	7	4	Healy
0mph		1	3	Greite
2.1mph		1	10	Briggs
1.9/6.3mph		10	3	Briggs
3-5mph	Nice, windy	2	5	St. Germain
2mph	warm, dry, clear	2	6	Begin
2mph	warm, dry, clear	2	3	Begin
1-5mph	cloudy	5		Allard
0-0.5mph	cloudy	1	8	MacNeil
0-0.1mph	cloudy	1	4	MacNeil
1mph	clear	3	6	Pojani
	clear	3	7	Pojani
1mph	clear	2	10	Pojani
1.3mph	Sunny, warm	5	2	Healy
1.7mph	Sunny, warm	10	4	Healy
0.5mph		1	2	Greite
0.2mph		5	10	Briggs
3.2mph		1	10	Briggs
1mph	Clear	2	5	Pojani
2.5mph	warm, dry, clear	5	4	Begin
3mph	nice, warm, dry	5	6	Begin
1.7mph	Sunny, warm	5	7	Healy
0mph	Sunny, warm	4	3	Healy
2.5mph	Nice, dry, clear	5	5	Begin
2mph	warm, dry, clear	5	6	Begin
0.5mph		1	2	Greite
1mph	clear	2	20	Pojani
0-0.3mph	sunny	1	6	MacNeil
0-2mph	Overcast, humid	1	8	MacNeil
3mph	Overcast	2	8	Begin
3.5mph	looks like T-storms, muggy	2	4	Begin
1mph	cloudy	2	10	Pojani
0.5-2mph	overcast, breezy	1	8	MacNeil
0.8mph	sunny, cool	4	1	Healy
0.7mph	cloudy, warm	7	2	Healy
2mph	clear, dry	5	6	Begin
2mph	clear, dry	5	6	Begin
1mph	clear	2	10	Pojani
2mph	clear	2	6	Pojani
1mph	clear	2	10	Pojani
1mph	clear	2	20	Pojani
1.1mph	Partly Cloudy, cool	10	6	Briggs
0.6mph	Partly Cloudy, cool	10	3	Briggs

2mph	Dry, cool, clouds (dark)	2	6	Begin
0.5mph	Dry, cool, clear	5	8	Begin
2mph	clear	2	6	Pojani
3mph	clear	2	10	Pojani
0.1mph	clear, cool	6	4	Briggs
2mph	warm, clear	5	8	Begin
2mph	warm, clear	5	5	Begin
1.1mph		4	2	St. Germain
0mph	overcast, breezy	1	5	MacNeil
calm	cloudy, humid	4	1	Nichols
2mph	overcast, rain, muggy	5	8	Begin
1.5mph	overcast, muggy	2	10	Begin
2mph	cloudy, scattered showers	2	10	Pojani
1mph	cloudy, scattered showers	2	10	Pojani
2mph	cloudy, scattered showers	2	6	Pojani
0.8mph	warm, cloudy	3	8	Briggs
4.5mph	warm, cloudy	5	5	Briggs
1.5mph	Damp, muggy, overcast	2	8	Begin
3mph	Thick clouds, overcast	1	14	Begin
1mph	clear	2	8	Pojani
1mph	clear	2	10	Pojani
1mph	clear	2	10	Pojani
1mph	clear	2	6	Pojani
1mph	nice	2	5	St. Germain
0mph	warm, partly cloudy	1	10	Briggs
0mph		1	2	Greite
1mph	clear	2	8	Pojani
2mph	clear	2	10	Pojani
1.3mph	clear, warm	4	8	Briggs
1.1mph	clear, warm	7	4	Briggs
1mph	cloudy, scattered showers	2	6	Pojani
1mph	cloudy, scattered showers	2	1	Pojani
1mph	cloudy, scattered showers	2	12	Pojani
1mph	cloudy, scattered showers	2	10	Pojani
1mph	Overcast, humid	5	0	Nichols
2mph	Overcast, humid	2	7	Begin
2mph	Overcast, humid	2	6	Begin
0.4mph	cloudy, warm	2	10	Briggs
0.2mph	cloudy, warm	1	10	Briggs
0mph	cloudy, humid	5	3	Healy
0mph	cloudy, humid	10	4	Healy
0mph	Overcast, humid	5	2	St. Germain
2.1mph	Nice, dry, clear	2	5	Begin
1.5mph	Nice, warm, clear, dry air	2	7	Begin
0mph	Sunny	1	4	MacNeil
0mph		1	3	MacNeil
2mph	Hot, muggy, sticky, clear	2	4	Begin
3mph	Hot, muggy, sticky, clear	2	7	Begin
1mph	clear	2	10	Pojani
1mph	clear	2	15	Pojani
1mph	clear	2	6	Pojani
0mph	Sunny, Humid	5	0	Healy

0mph	Sunny, Humid	5	3	Healy
1.2mph	clear, warm	2	7	Briggs
2mph	sticky, muggy, T-storms	2	4	Begin
2.1mph	sticky, muggy, T-storms	2	6	Begin
0.6mph	warm, partly cloudy	6	4	Briggs
0.2mph	clear, warm	5	4	Briggs
0.8mph	clear, warm	2	8	Briggs
2.5mph	Hot, muggy, sticky, clear	2	4	Begin
2mph	Hot, muggy, sticky, clear	2	7	Begin
0.3mph	clear, warm	2	6	Briggs
1.2mph	clear, warm	6	10	Briggs
2.4mph	clear, warm	10	5	Briggs
1mph	clear	2	10	Pojani
1mph	clear	2	6	Pojani
1mph	clear	2	8	Pojani
1mph	clear	2	8	Pojani
1mph	clear	2	15	Pojani
1.8mph	clear, warm	7	5	Briggs
0.7mph	clear, warm	4	8	Briggs
2mph	cloudy	2	10	Pojani
2mph	cloudy	2	6	Pojani
4mph	clear	2	10	Pojani
1mph	clear	2	10	Pojani
1mph	clear	2	8	Pojani
1mph	clear	2	5	Pojani
2mph	clear	2	10	Pojani
1mph	clear	2	6	Pojani
1mph	clear	2	8	Pojani
0.6mph	clear, warm	3	8	Briggs
2mph	clear	2	10	Pojani
2mph	clear	2	8	Pojani

AREA SPRAYED?	SPECIES ID	COMMENTS
Yes		
No	<i>Oc. Canadensis</i>	
Yes	<i>Oc. Stimulans</i>	
Yes		
Yes	<i>Oc. Stimulans</i>	
Yes	2 <i>Oc. Punctor</i> , 1 <i>Oc. Stimulans</i> , 1 <i>Oc. Abserratus</i>	
Yes	2 <i>Oc. Punctor</i> , 1 <i>Oc. Abserratus</i>	
No		
Yes	<i>Oc. Excrucians</i>	
Yes	<i>Oc. Sp.</i>	
No		didn't see a single mosquito
No	<i>An. Punctipennis</i>	swarmed!
Yes	<i>Oc. Stimulans</i>	
No	<i>Oc. Species</i>	
Yes	<i>Oc. Excrucians</i> , <i>Oc. Stimulans</i>	
No	<i>Oc. Japonicus</i>	
No	<i>Oc. Stimulans</i>	
	2 <i>Oc. Punctor</i>	
	<i>Oc. Punctor</i>	
Yes	2 <i>Oc. Abserratus/punctor</i>	
No	<i>Oc. Abserratus/punctor</i>	
Yes	<i>Ae. Cinereus</i>	
Yes	<i>Oc. Excrucians</i>	
Yes		
Yes	<i>Oc. Abserratus</i>	
No	<i>Oc. Prouocons</i>	
	2 <i>Oc. Abserratus/punctor</i>	
No		
No		
Yes	<i>Oc. Stimulans</i>	
No	<i>Oc. Prouocons</i>	
Yes	<i>Oc. Abserratus</i>	
Yes	<i>Oc. Excrucians</i>	
Yes		
Yes	<i>Oc. Excrucians</i>	
Yes	<i>Oc. Excrucians</i>	
Yes	<i>Oc. Excrucians</i> , <i>Oc. Stimulans</i>	
Yes		swarmed when got out of truck
	<i>Ae. Cinereus</i>	
Yes	<i>Oc. Abserratus</i>	
Yes		
	<i>Oc. Stimulans</i>	
	<i>Oc. Sp.</i>	

Yes
Yes
Yes
Yes
Yes
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Yes

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Yes

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Yes

Yes
Yes
Yes
Yes
Yes
No
Yes
Yes
Yes
Yes

Yes
Yes
Yes
Yes

TOWN	DIST.	DATE	MAP SECTION	LOCATION	TYPE OF AREA
Ashland	4	26-Apr-07		High St. #176	swamp
Ashland	4	30-Apr-07		High St. #176	swamp
Ashland	4	26-Apr-07		High St. Little League	swamp
Ashland	4	30-Apr-07		High St. Little League	swamp
Ashland	4	26-Apr-07		Cross St. opp. Pole #9	swamp
Ashland	4	30-Apr-07		Cross St. opp. Pole #9	swamp
Ashland	4	26-Apr-07		Hardwick Rd.	retention Pond
Ashland	4	30-Apr-07		Hardwick Rd.	retention Pond
Ashland	4	26-Apr-07		High St. opp. Pole 62	swamp
Ashland	4	30-Apr-07		High St. opp. Pole 62	swamp
Ashland	4	26-Apr-07		Cross St. at pole #3	woodland pool
Ashland	4	30-Apr-07		Cross St. at pole #3	woodland pool
Wilmington	1	28-Apr-07		Chestnut St. House #76	potholes
Wilmington	1	30-Apr-07		Chestnut St. House #76	potholes
Wilmington	1	28-Apr-07		Chestnut St.right #76	woodland pool
Wilmington	1	30-Apr-07		Chestnut St.right #76	woodland pool
Ashland	4	1-May-07		High St. Little League	swamp
Ashland	4	2-May-07		High St. Little League	swamp
Ashland	4	1-May-07		High St. #176	swamp
Ashland	4	2-May-07		High St. #176	swamp
Holliston	4	30-Apr-07		Adams St. pole 49-45	swamp
Holliston	4	2-May-07		Adams St. pole 49-45	swamp
Holliston	4	30-Apr-07		Adams St. #519	swamp
Holliston	4	2-May-07		Adams St. #519	swamp
Holliston	4	30-Apr-07		Hanlon Rd. #238	swamp
Holliston	4	2-May-07		Hanlon Rd. #238	swamp
Holliston	4	30-Apr-07		Hanlon Rd.pole#13	swamp
Holliston	4	2-May-07		Hanlon Rd.pole#13	swamp
Holliston	4	30-Apr-07		Hanlon Rd. pole #19	woodland pool
Holliston	4	2-May-07		Hanlon Rd. pole #19	woodland pool
Holliston	4	30-Apr-07		Adams St.poles6-7	woodland pool
Holliston	4	2-May-07		Adams St.poles6-7	woodland pool
Holliston	4	30-Apr-07		Adams St.pole 62	woodland pool
Holliston	4	2-May-07		Adams St. pole 62	woodland pool
Holliston	4	30-Apr-07		Adams St.#450-456	swamp
Holliston	4	2-May-07		Adams St.#450-456	swamp
Holliston	4	30-Apr-07		Hanlon Rd. pole#13	swamp
Holliston	4	2-May-07		Hanlon Rd. pole#13	swamp
Holliston	4	30-Apr-07		Hanlon Rd.pole 75-14	swamp
Holliston	4	2-May-07		Hanlon Rd.pole 75-14	swamp
Hopkinton	4	30-Apr-07		Cordaville Rd. Park ent.	woodland pool
Hopkinton	4	2-May-07		Cordaville Rd. Park ent.	woodland pool
Hopkinton	4	30-Apr-07		Fruit St. pole 49	woodland pool
Hopkinton	4	2-May-07		Fruit St. pole 49	woodland pool
Hopkinton	4	30-Apr-07		North St.pole 40/15	woodland pool
Hopkinton	4	2-May-07		North St.pole 40/15	woodland pool
Hopkinton	4	30-Apr-07		Fruit St. pole 96	swamp
Hopkinton	4	2-May-07		Fruit St. pole 96	swamp
Hopkinton	4	30-Apr-07		North St. pole 3	swamp
Hopkinton	4	2-May-07		North St. pole 3	swamp

Hopkinton	4	30-Apr-07	North St. #35	swamp
Hopkinton	4	2-May-07	North St.#35	swamp
Clinton	3	30-Apr-07	Candice St. opp, #44	swamp
Clinton	3	2-May-07	Candice St. opp #44	swamp
Clinton	3	30-Apr-07	Candice St. behind#44	swamp
Clinton	3	2-May-07	Candice St. behind#44	swamp
Clinton	3	30-Apr-07	Candice St. behind #42	swamp
Clinton	3	2-May-07	Candice St. behind #42	swamp
Northboro	3	1-May-07	Maynard St. opp #97	potholes
Northboro	3	2-May-07	Maynard St. opp #97	potholes
Northboro	3	1-May-07	Maynard St. front of 97	swamp
Northboro	3	2-May-07	Maynard St. front of 97	swamp
Shrewsbury	3	1-May-07	Grove St. left of #50	potholes
Shrewsbury	3	2-May-07	Grove St. left of #50	potholes
Shrewsbury	3	1-May-07	Arrowwood Dr.opp. Pole4	swamp
Shrewsbury	3	2-May-07	Arrowwood Dr.opp. Pole4	swamp
Shrewsbury	3	1-May-07	Arrowwood Dr.playground	swamp
Shrewsbury	3	2-May-07	Arrowwood Dr.playground	swamp
Hudson	3	30-Apr-07	Hosmer St.opp. Pole 4	potholes
Hudson	3	2-May-07	Hosmer St.opp. Pole 4	potholes
Hudson	3	30-Apr-07	Shay St.pole 9	woodland pool
Hudson	3	2-May-07	Shay St.pole 9	woodland pool
Sherborn	4	24-Apr-07	Bogastow Brook Rd #30	woodland pool
Sherborn	4	2-May-07	Bogastow Brook Rd #30	woodland pool
Dracut	1	26-Apr-07	6 MacIntosh Dr.#3	retention Pond
Dracut	1	7-May-07	6 MacIntosh Dr.#3	retention Pond
Dracut	1	26-Apr-07	6 MacIntosh Dr.#2	swamp
Dracut	1	7-May-07	6 MacIntosh Dr.#2	swamp
Dracut	1	26-Apr-07	Garrison Rd. #25	swamp
Dracut	1	7-May-07	Garrison Rd. #25	swamp
Billerica	1	1-May-07	Andover Rd.#249	woodland pool
Billerica	1	7-May-07	Andover Rd.#249	woodland pool
Billerica	1	1-May-07	Gov. Hutchinson Rd.#16	woodland pool
Billerica	1	7-May-07	Gov. Hutchinson Rd.#16	woodland pool
Billerica	1	1-May-07	3 Olney St.	swamp
Billerica	1	7-May-07	3 Olney St.	swamp
Billerica	1	1-May-07	3 Connolly Rd. pole #11	woodland pool
Billerica	1	7-May-07	3 Connolly Rd. pole #11	woodland pool
Natick	4		7 Bacon Rd. #66	temporary
Natick	4	7-May-07	7 Bacon Rd. #66	temporary
Tewksbury	1	3-May-07	26 Brown St.#75	ditch
Tewksbury	1	8-May-07	26 Brown St.#75	ditch
Billerica	1	7-May-07	11 Staples Rd. pole #2	canal
Billerica	1	10-May-07	11 Staples Rd. pole #2	canal
Billerica	1	1-May-07	10 Millers Farm Rd. #27	woodland pool
Billerica	1	10-May-07	10 Millers Farm Rd. #27	woodland pool
Billerica	1	7-May-07	10 Gov.Fuller Rd.	woodland pool
Billerica	1	10-May-07	10 Gov. Fuller Rd.	woodland pool
Billerica	1	7-May-07	10 Gov. Fuller Rd. #33	woodland pool
Billerica	1	10-May-07	10 Gov. Fuller Rd. #33	woodland pool
Billerica	1	7-May-07	10 Gov. Doherty Rd. #20	temporary
Billerica	1	10-May-07	10 Gov. Doherty Rd. #20	temporary

BillERICA	1	7-May-07	10 Gov. Doherty Rd.#21	potholes
BillERICA	1	10-May-07	10 Gov. Doherty Rd.#21	potholes
Chelmsford	1	30-Apr-07	16 Proctor Rd.#157	pond
Chelmsford	1	10-May-07	16 Proctor Rd.#157	pond
Chelmsford	1	30-Apr-07	16 Proctor Rd. #172	woodland pool
Chelmsford	1	10-May-07	16 Proctor Rd. #172	woodland pool
Chelmsford	1	30-Apr-07	16 Kenwood Rd. #5	woodland pool
Chelmsford	1	10-May-07	16 Kenwood Rd. #5	woodland pool
Chelmsford	1	30-Apr-07	16 Smokerise Dr.#3+5	temporary
Chelmsford	1	10-May-07	16 Smokerise Dr.#3+5	temporary
Chelmsford	1	30-Apr-07	16 Smokerise Dr.#3+5	ditch
Chelmsford	1	10-May-07	16 Smokerise Dr.#3+5	ditch
Berlin	3	7-May-07	1 Autumn Ridge	cattail
Berlin	3	10-May-07	1 Autumn Ridge	cattail
Sturbridge	5	30-Apr-07	4 Wittemore Rd. #49	swamp
Sturbridge	5	12-May-07	4 Wittemore Rd. #49	swamp
Dracut	1	2-May-07	3 Primrose Hill Rd. #41	pond
Dracut	1	11-May-07	3 Primrose Hill Rd. #41	pond
Dracut	1	2-May-07	5 Cross St. pole #2/2	woodland pool
Dracut	1	11-May-07	5 Cross St. pole #2/2	woodland pool
Dracut	1	2-May-07	5 Cross St. pole #8	temporary
Dracut	1	11-May-07	5 Cross St. pole #8	temporary
Dracut	1	2-May-07	6 Chuck Dr. opp pole #8	container
Dracut	1	11-May-07	6 Chuck Dr. opp pole #8	container
Dracut	1	2-May-07	6 Bridge St. pole. 312/1	swamp
Dracut	1	11-May-07	6 Bridge St. pole. 312/1	swamp
Dracut	1	26-Apr-07	5 Frank St. #5	
Dracut	1	11-May-07	5 Frank St. #5	
Littleton	1	4-May-07	Bruce St. pole #11	woodland pool
Littleton	1	11-May-07	Bruce St. pole #11	woodland pool
Littleton	1	4-May-07	5 Bruce St. pole #13	woodland pool
Littleton	1	11-May-07	5 Bruce St. pole #13	woodland pool
Littleton	1	4-May-07	5 Brandy Hollow Rd. #10	woodland pool
Littleton	1	11-May-07	5 Brandy Hollow Rd. #10	woodland pool
Littleton	1	4-May-07	5 Brandy Hollow Rd. #10	woodland pool
Littleton	1	11-May-07	5 Brandy Hollow Rd. #10	woodland pool
Littleton	1	4-May-07	5 Harvard Rd. pole 34	woodland pool
Littleton	1	11-May-07	5 Harvard Rd. pole 34	woodland pool
Littleton	1	4-May-07	5 Harvard Rd. #139	woodland pool
Littleton	1	11-May-07	5 Harvard Rd. #139	woodland pool
Sherborn	4	24-Apr-07	13 Bogastow Brook Rd.	woodland pool
Sherborn	4	11-May-07	13 Bogastow Brook Rd.	woodland pool
Marlboro	3	26-Apr-07	11 Raymond Dr. opp.pole196	woodland pool
Marlboro	3	14-May-07	11 Raymond Dr. opp.pole196	woodland pool
Marlboro	3	26-Apr-07	11 Raymond Dr. pole #14	woodland pool
Marlboro	3	14-May-07	11 Raymond Dr. pole #14	woodland pool
Marlboro	3	26-Apr-07	11 Boufard Dr. #37	woodland pool
Marlboro	3	14-May-07	11 Boufard Dr. #37	woodland pool
Marlboro	3	26-Apr-07	11 Boufard Dr. #51	swamp
Marlboro	3	14-May-07	11 Boufard Dr. #51	swamp
Tewksbury	1	3-May-07	27 Cabot Rd.#180	ditch
Tewksbury	1	14-May-07	27 Cabot Rd.#180	ditch

Tewksbury	1	3-May-07	27 Cabot Rd. #180	woodland pool
Tewksbury	1	14-May-07	27 Cabot Rd. #180	woodland pool
Tewksbury	1	3-May-07	27 Cabot Rd. #180	woodland pool
Tewksbury	1	14-May-07	27 Cabot Rd. #180	woodland pool
Tewksbury	1	3-May-07	27 Edwonsor Rd. #10	reflood
Tewksbury	1	14-May-07	27 Edwonsor Rd. #10	reflood
Tewksbury	1	3-May-07	27 Alabama #154	pool
Tewksbury	1	14-May-07	27 Alabama #154	pool
Tewksbury	1	11-May-07	7 Valewood Cir.	woodland pool
Tewksbury	1	14-May-07	7 Valewood Cir.	woodland pool
Westford	1	30-Apr-07	16 Griffin Rd. pole #3	swamp
Westford	1	14-May-07	16 Griffin Rd. pole #3	swamp
Westford	1	30-Apr-07	16 Griffin Rd. #2	swamp
Westford	1	14-May-07	16 Griffin Rd. #2	swamp
Westford	1	30-Apr-07	16 Koala Bear Ln #8	swamp
Westford	1	14-May-07	16 Koala Bear Ln #8	swamp
Westford	1	30-Apr-07	16 Griffin Rd. pole #52	R.R. ditches
Westford	1	14-May-07	16 Griffin Rd. pole #52	R.R. ditches
Westford	1	30-Apr-07	17 Preservation Way #30	swamp
Westford	1	14-May-07	17 Preservation Way #30	swamp
Westboro	4	8-May-07	Lydia's Path #2	woodland pool
Westboro	4	9-May-07	Lydia's Path #2	woodland pool
Westboro	4	10-May-07	Lydia's Path #2	woodland pool
Westboro	4	11-May-07	Lydia's Path #2	woodland pool
Westboro	4	8-May-07	Sassacus Dr. Post office	swamp
Westboro	4	9-May-07	Sassacus Dr. Post office	swamp
Westboro	4	10-May-07	Sassacus Dr. Post office	swamp
Westboro	4	11-May-07	Sassacus Dr. Post office	swamp
Westboro	4	8-May-07	Mill St. boat ramp	swamp
Westboro	4	9-May-07	Mill St. boat ramp	swamp
Westboro	4	10-May-07	Mill St. boat ramp	swamp
Westboro	4	11-May-07	Mill St. boat ramp	swamp
Dracut	1	7-May-07	10 Sophia Dr.	swamp
Dracut	1	16-May-07	10 Sophia Dr.	swamp
Littleton	1	11-May-07	7 Roxbury Dr. pole #2	woodland pool
Littleton	1	17-May-07	7 Roxbury Dr. pole #2	woodland pool
Littleton	1	11-May-07	7 Middlesex Dr.pole #2	woodland pool
Littleton	1	17-May-07	7 Middlesex Dr.pole #2	woodland pool
Littleton	1	11-May-07	7 Middlesex Dr.pole #1	swamp
Littleton	1	17-May-07	7 Middlesex Dr. pole #1	swamp
Littleton	1	11-May-07	7 Ipswich Dr. opp. Pole #4	woodland pool
Littleton	1	17-May-07	7 Ipswich Dr. opp. Pole #4	woodland pool
Tewksbury	1	3-May-07	16 Trull Rd. Pole #14	woodland pool
Tewksbury	1	17-May-07	16 Trull Rd. Pole #14	woodland pool
Tewksbury	1	3-May-07	16 Trull Rd. opp. Pole #14	woodland pool
Tewksbury	1	17-May-07	16 Trull Rd. opp. Pole #14	woodland pool
Tewksbury	1	3-May-07	16 Sunny Slope Ave	woodland pool
Tewksbury	1	17-May-07	16 Sunny Slope Ave	woodland pool
Tewksbury	1	3-May-07	16 Highland View Rd. #53	woodland pool
Tewksbury	1	17-May-07	16 Highland View Rd. #53	woodland pool
Wilmington	1	28-Apr-07	5 Pinewood Rd. 16R	swamp
Wilmington	1	15-May-07	5 Pinewood Rd. 16R	swamp

Wilmington	1	28-Apr-07		5 12 Pinewood Rd.	swamp
Wilmington	1	15-May-07		5 12 Pinewood Rd.	swamp
Wilmington	1	5-May-07		5 15 Pinewood Rd.	swamp
Wilmington	1	15-May-07		5 15 Pinewood Rd.	swamp
Wilmington	1	9-May-07		13 Andrew St.	retention Pond
Wilmington	1	15-May-07		13 Andrew St.	retention Pond
Wilmington	1	9-May-07		13 Andrew St.	woodland pool
Wilmington	1	15-May-07		13 Andrew St.	woodland pool
Ashland	4	3-May-07	5,9	Olive St. #115	woodland pool
Ashland	4	14-May-07	5,9	Olive St. #115	woodland pool
Millbury	5	9-May-07		5 Washington St.	swamp
Millbury	5	15-May-07		5 Washington St.	swamp
Millbury	5	9-May-07		5 Washington St.	swamp
Millbury	5	15-May-07		5 Washington St.	swamp
Millbury	5	20-Apr-07	3,4	Riverlin St., Deering WMA	swamp
Millbury	5	15-May-07	3,4	Riverlin St., Deering WMA	swamp

SITE #	PRE	POST	PESTICIDE APPLIED	PESTICIDE AMOUNT	1ST INSTAR	2ND INSTAR
18	x		Vecto-G	1lb	x	
18		x				x
20	x		Vecto-G	2lbs	x	
20		x				x
107	x		Vecto-G	8lbs	x	x
107		x				
200	x		Vecto-G	2lbs	x	
200		x				
15	x		Vecto-G	12lbs	x	x
15		x				
108	x		Vecto-G	1lb	x	x
108		x				
136B	x		Vecto-G	1lb	x	
136B		x				
136A	x		Vecto-G	4lbs	x	x
136A		x				
20	x		Vecto-G	2lbs	x	x
20		x				
18	x		Vecto-G	4lbs	x	x
18		x				
41	x		Vecto-G	5lbs	x	x
41		x				
38	x		Vecto-G	1lb	x	x
38		x				
32	x		Vecto-G	3lbs		x
32		x				
28a	x		Vecto-G	12lbs	x	x
28a		x				
31	x		Vecto-G	4lbs		x
31		x				
45	x		Vecto-G	3 1/2lbs	x	x
45		x				
35a	x		Vecto-G	3lbs	x	x
35a		x				
41a	x		Vecto-G	5lbs	x	x
41a		x				
28	x		Vecto-G	12lbs	x	x
28		x				
30	x		Vecto-G	6lbs		x
30		x				
	x		Vecto-G	10lbs	x	x
		x				
88	x		Vecto-G	8lbs	x	x
88		x				
81	x		Vecto-G	8lbs	x	x
81		x				
91a	x		Vecto-G	6lbs	x	x
91a		x				
87	x		Vecto-G	6lbs	x	x
87		x				

85	x		Vecto-G	6lbs	x	x
85		x				
	x		Vecto-G	3lbs		x
		x				
	x		Vecto-G	6lbs		x
		x				
	x		Vecto-G	4lbs		x
		x				
	x		Vecto-G	2lbs		
		x				
	x		Vecto-G	7lbs	x	x
		x				
	x		Vecto-G	2lbs		x
20		x				
2	x		Vecto-G	3lbs		
0		x				
146	x		Vecto-G	6lbs		x
146		x				
30	x		Vecto-G			x
30		x				
28	x		Vecto-G			x
28		x				x
21b	x		Vecto-G	8lbs	x	X
21B		x				
	x		Vecto-G	4oz.	x	x
		x				
159	x		Vecto-G	2lbs 2oz.	x	x
159		x				
117	x		Vecto-G	4lbs	x	x
117		x				
168	x		Vecto-G	4lbs		x
168		x				
250	x		Vecto-G	2lbs		
250		x				
2	x		Vecto-G	8lbs	x	x
2		x				
21	x		Vecto-G	7lbs	x	x
21		x				
	x					
		x				
363B	x		Vecto-G	5lbs		x
363B		x				
170a	x		Vecto-G	3lbs		x
170a		x				
209a	x		Vecto-G	13lbs		x
209a		x				
177	x		Vecto-G	3lbs		
177		x				
61	x		Vecto-G	3lbs		x
61		x				
175	x		Vecto-G	3lbs	x	x
175		x				

175a	x		Vecto-G	3lbs	x	
175a		x				
263	x		Vecto-G			
263		x				
280	x		Vecto-G		x	x
280		x				
279	x		Vecto-G	2lbs	x	x
279		x				
157	x		Vecto-G	3lbs 8oz.	x	
157		x				
157a	x		Vecto-G	2lbs	x	
157a		x				
95	x		Vecto-G	2lbs		x
95		x				
	x		Vecto-G	3 1/2lbs		x
		x				
158	x		Vecto-G	4lbs		x
158		x				
58D	x		Vecto-G	1lb	x	
58D		x				
58c	x		Vecto-G	8oz		x
58c		x				
55b	x		Vecto-G	4oz.	x	
55b		x				
	x		Vecto-G	2lbs	x	
		x				
160	x		Vecto-G	1lb	x	
160		x				
44	x		Vecto-G	5lbs		x
44		x				
43	x		Vecto-G	2lbs		x
43		x				
41a	x		Vecto-G	1/2 lb		
41a		x				
41	x		Vecto-G	1/2lb		
41		x				
	x		Vecto-G	1/2lb		x
		x				
38	x		Vecto-G	2lbs		x
38		x				
	x		Vecto-G	10lbs	x	x
		x				
160	x		Vecto-G	1lb		x
160		x				
119	x		Vecto-G	10lbs		x
119		x				
52	x		Vecto-G	2lbs		x
52		x				
159	x		Vecto-G	1lb		x
159		x				
139B	x		Vecto-G	2 1/2lbs		x
139B		x				

139a	x		Vecto-G	1lb	x	x
139a		x				
139	x		Vecto-G	5lbs		x
139		x				
216b	x		Vecto-G	3lbs		
216b		x				
216a	x		Vecto-G	2lbs		x
216a		x				
337	x		Vecto-G	5lbs		
337		x				
128f	x		Vecto-G	2lbs	x	x
128f		x				
144	x		Vecto-G	4lbs	x	x
144		x				
128D	x		Vecto-G	10lbs	x	x
128D		x				
145	x		Vecto-G	2lbs	x	x
145		x				
151	x		Vecto-G	8lbs	x	x
151		x				
	x		Vecto-G	4lbs	x	x
		x				
	x		witco G.B	30 oz.		
		x				
205	x		Vecto-G	4lbs	x	x
205		x				
205	x		witco G.B	16 oz.		
205		x				
72	x		Vecto-G	4lbs	x	x
72		x				
72	x		witco G.B	16 oz.		
72		x				
122G	x		Vecto-G	7lbs	x	x
122G		x				
75	x		Vecto-G	2lbs		
75		x				
76	x		Vecto-G	8 oz.		
76		x				
75a	x		Vecto-G	2 1/2lbs		
75a		x				
79	x		Vecto-G	8oz	x	
79		x				
86b	x		Vecto-G	1/4 lb		x
86b		x				
86	x		Vecto-G	2lbs		x
86		x				
85a	x		Vecto-G	2lbs	x	
85a		x				
77	x		Vecto-G	5lbs		x
77		x				
176a	x		Vecto-G	6lbs	x	
176a		x				

176	x		Vecto-G	6lbs	x	
176		x				
185	x		Vecto-G	8lbs		
185		x				
96b	x		Vecto-G	8 oz.		x
96b		x				
96a	x		Vecto-G	3lbs		x
96a		x				
	x		Vecto-G		x	x
		x				
101	x		Vecto-G	25lbs		x
101		x				
100	x		Vecto-G	20lbs		x
100		x				
30	x		Vecto-G	3lbs		x
30		x				

3RD INSTAR	4TH INSTAR	PUPAE	#/DIP	WEATHER	SURVEYED BY	ADD'L COMMENTS
			5		Pojani	
x			5	cloudy	TD	
			3		Pojani	
			5	cloudy	TD	
			8		Pojani	
			0	lite rain	TD	dead larvae and BTI present
			4		Pojani	
			0	cloudy	TD	dead larvae and BTI present
			8		Pojani	
			0	cloudy	TD	dead larvae and BTI present
x			8		Pojani	
			0	lite rain	TD	dead larvae and BTI present
x			2		Jay	
			0		TM	
x			2		Jay	
			0		TM	
			6		Pojani	
			0		TD	
x			6		Pojani	
			0		TD	
			3		Briggs	
			0		TD	
x			10		Briggs	
			0		TD	
x	x		4		Briggs	
			0		TD	
x			6		Briggs	
			0		TD	
			4		Briggs	
			0		TD	
x			3		Briggs	
			0		TD	
x			3		Briggs	
			0		TD	
x			5		Briggs	
			0		TD	
x			4		Briggs	
			0		TD	
x	x		10		Briggs	
			0		TD	
			6		Pojani	
	x		0		TD	2 larvae found in 20 dips
x			20		Pojani	
			0		Td	
			8		Pojani	
			0		TD	
			6		Pojani	
			0		TD	
			6		Pojani	
			0		TD	

		4	Pojani	
		0	TD	
x		4	allard	
x		0	TM	2 larvae found in 12 dips
x	x	8	allard	
		0	TM	
x		5	allard	
		0	TM	
x		3	allard	
		0	TM	
x		3	allard	
		0	TM	
x		6	St. Germain	
		0	TM	
x		2	St. Germain	
		0	TM	
x		4	St. Germain	
x		0	TM	2larvae found in 30 dips in are:
		2	St. Germain	
		0	TM	
x		3	St. Germain	
		4	TM	no BTI detected at site
		6	Pojani	
		0	Pojani	
		6	MacNeil	
		0	MacNeil	
		2	MacNeil	
		0	MacNeil	
x		10	MacNeil	
		0	MacNeil	
x		4	Begin	
		0	Begin	
x		6	Begin	
		0	Begin	
		2	Begin	
		0	Begin	
		2	Begin	
		0	Begin	
			Pojani	
		0	Pojani	
x		3	MacNeil	
		0	MacNeil	
		4	Begin	
		0	Begin	
		2	Begin	called in by #18
		0	Begin	
x		3	Begin	
		0	Begin	
x		4	Begin	
		0	Begin	
		3	Begin	
		0	Begin	

	3	Begin
	0	Begin
x	3	MacNeil
	0	MacNeil
	3	MacNeil
	0	MacNeil
	2	MacNeil
	0	MacNeil
	4	MacNeil
	0	MacNeil
	2	MacNeil
	0	MacNeil
	3	allard
	0	allard
	5	swinerton
	0	MacNeil
	3	MacNeil
	0	MacNeil
	3	MacNeil
	0	MacNeil
x	4	MacNeil
	0	MacNeil
	10	MacNeil
	0	MacNeil
	2	MacNeil
	0	MacNeil
	1	MacNeil
	0	MacNeil
x	4	Begin
	0	Begin
	3	Begin
	0	Begin
x	4	Begin
	0	Begin
x	3	Begin
	0	Begin
x	3	Begin
	0	Begin
x	3	Begin
	0	Begin
	10	Briggs
	0	Briggs
x	10	allard
	0	allard
x	15	allard
	0	allard
	2	allard
	0	allard
	3	allard
	0	allard
x	2	Begin
	0	Begin

x				3	Begin	
				0	Begin	
x				4	Begin	
				0	Begin	
x				3	Begin	
				0	Begin	
x				3	Begin	
				0	Begin	
x	x			3	Begin	
				0	Begin	
				4	MacNeil	
x	x	x		2	MacNeil	
				8	MacNeil	
				0	MacNeil	
x				2	MacNeil	
				0	MacNeil	
x				4	MacNeil	
				0	MacNeil	
x				20	MacNeil	
				0	MacNeil	
x				4	Pojani	
			x	2	TD	dead larvae and BTI present
			x	3	Pojani	
				0	TD	
x				5	Pojani	
			x	4/20dips	TD	
			x	3	Pojani	
				0	TD	
				6	Pojani	
	x			2	TD	
			x	3	Pojani	
				0	TD	
x				5	MacNeil	
				0	MacNeil	
x				2	MacNeil	
				0	MacNeil	
x	x			2	MacNeil	
				0	MacNeil	
x	x			2	MacNeil	
				0	MacNeil	
				2	MacNeil	
				0	MacNeil	
x				3	Begin	
				0	Begin	
x				5	Begin	
				0	Begin	
				2	Begin	
				0	Begin	
				4	Begin	
x				0	Begin	
				3	MacNeil	
				0	MacNeil	

			2	MacNeil	
			0	MacNeil	
x			3	MacNeil	
			0	MacNeil	
x	x	x	25	MacNeil	
		x	1	MacNeil	retreated w/agnique
x		x	3	MacNeil	
		x	5	MacNeil	retreated w/agnique
			8	Pojani	
			0	Pojani	
x	x		5	Pojani	
			0	Pojani	
x			5	Pojani	
			0	Pojani	
			3	Pojani	
			0	Pojani	

LARVAL ID

a's with BTI

TOWN	DIST.	DATE	MAP SECTION	LOCATION	TYPE OF AREA	SITE #
Hopedale	4	9-Apr		Parkland-Hazel St.	Swamp	1B
Hopedale	4	15-Apr		Parkland-Hazel St.	Swamp	1B
Hopedale	4	9-Apr		Freedom St.Parklands	woodland pool	12
Hopedale	4	15-Apr		Freedom St.Parklands	woodland pool	12
Ashland	4	11-Apr		Kings Row #28	Swamp	22
Ashland	4	15-Apr		Kings Row #28	Swamp	22
Ashland	4	11-Apr		High St.Gryncel Park	Swamp	20
Ashland	4	15-Apr		High St.Gryncel Park	Swamp	20
Hopkinton	4	9-Apr		Saddle Hill Rd. pole 48	woodland pool	80
Hopkinton	4	15-Apr		Saddle Hill Rd. pole 48	woodland pool	80
Hopkinton	4	9-Apr		Ridge Rd.	Swamp	77a
Hopkinton	4	15-Apr		Ridge Rd.	woodland pool	77a
Westford	1	7-Apr		Southwick Cir.	Retention area	189 D
Westford	1	16-Apr		Southwick Cir.	Retention area	189D
Westford	1	7-Apr		Butterfield Ln.	Retention area	189C
Westford	1	16-Apr		Butterfield Ln.	Retention area	189C
Westboro	4	11-Apr		Milk St. behind Outback	Retention area	156
Westboro	4	17-Apr		Milk St. behind Outback	Retention area	156
Westboro	4	11-Apr		Milk St. behind Outback	Retention area	155
Westboro	4	17-Apr		Milk St. behind Outback	Retention area	155
Westboro	4	11-Apr		Adams St. opp pole 78	Swamp	120a
Westboro	4	17-Apr		Adams St. opp pole 78	Swamp	120a
Westboro	4	11-Apr		Nipmuck Dr. btw 15-17	Swamp	143b
Westboro	4	17-Apr		Nipmuck Dr. btw 15-17	Swamp	143b
Westboro	4	11-Apr		Nipmuck Dr.end of road	woodland pool	177
Westboro	4	17-Apr		Nipmuck Dr. end of road	woodland pool	177
Westboro	4	11-Apr		Nipmuck Dr.end of road	woodland pool	
Westboro	4	17-Apr		Nipmuck Dr. end of road	woodland pool	
Westboro	4	11-Apr		Adams st. @ pole 78	Swamp	120
Westboro	4	17-Apr		Adams st. @ pole 78	Swamp	120
Westboro	4	11-Apr		Gilmore Farm Rd.	potholes	207a
Westboro	4	17-Apr		Gilmore Farm Rd.	potholes	207a
Westboro	4	11-Apr		Gilmore Farm Rd./Quick Farm	Retention area	207
Westboro	4	17-Apr		Gimore Farm Rd./Quick Farm	Retention area	207
Shrewsbury	3	14-Apr		Heywood St. behind #19	Swamp	
Shrewsbury	3	17-Apr		Heywood St. behind #19	Swamp	
Shrewsbury	3	14-Apr		Arch St. behind #12	Swamp	
Shrewsbury	3	17-Apr		Arch St. behind #12	Swamp	
Ashland	4	24-Mar		High St./Cross St.	woodland pool	12
Ashland	4	18-Apr		High St./Cross St.	woodland pool	12
Ashland	4	11-Apr		High St./ Gryncel Park	Swamp	20
Ashland	4	18-Apr		High St./Gryncel Park	Swamp	20
Fitchburg	2	17-Apr		Rindge Rd.pole # 83	Swamp	101
Fitchburg	2	18-Apr		Rindge Rd.pole # 83	Swamp	101
Fitchburg	2	17-Apr		Ashby West Rd.	woodland pool	121
Fitchburg	2	18-Apr		Ashby West Rd.	woodland pool	121
Fitchburg	2	17-Apr		Scott Rd.	woodland pool	122
Fitchburg	2	18-Apr		Scott Rd.	woodland pool	122
Sherborn	4	31-Mar		Spywood Rd.#10	woodland pool	
Sherborn	4	17-Apr		Spywood Rd.#10	woodland pool	

Sherborn	4	7-Apr	Farm Rd. opp pole 29	woodland pool	
Sherborn	4	17-Apr	Farm Rd. opp pole 29	woodland pool	
Webster	5	10-Apr	Kiebart Ave opp pole 13	Swamp	
Webster	5	17-Apr	Kiebart Ave opp pole 13	Swamp	
Webster	5	10-Apr	Kiebart Ave @pole 11-13	Swamp	85
Webster	5	17-Apr	Kiebart Ave @pole 11-13	Swamp	85
Hopkinton	4	15-Apr	W. Main St.Golden Spoon	Swamp	29a
Hopkinton	4	23-Apr	W. Main St.Golden Spoon	Swamp	29a
Uxbridge	5	16-Apr	Hartford Ave. # 470	Swamp	
Uxbridge	5	23-Apr	Hartford Ave. # 470	Swamp	
Uxbridge	5	16-Apr	Hartford Ave. opp. Pole 75/46	Swamp	
Uxbridge	5	23-Apr	Hartford Ave. opp. Pole 75/46	Swamp	
Sturbridge	5	16-Apr	Bushnell Rd.pole 1x	woodland pool	60
Sturbridge	5	23-Apr	Bushnell Rd.pole 1x	woodland pool	60
Sturbridge	5	16-Apr	Wells State Park	woodland pool	49
Sturbridge	5	23-Apr	Wells State Park	woodland pool	49
Webster	5	17-Apr	Windy Ridge Rd. #112	woodland pool	107
Webster	5	24-Apr	Windy Ridge Rd. #112	woodland pool	107
Webster	5	17-Apr	McGovern Ln. #15	Swamp	105
Webster	5	24-Apr	McGovern Ln. #15	Swamp	105
Natick	4	16-Apr	32 Barnsdale Rd.	woodland pool	74
Natick	4	24-Apr	32 Barnsdale Rd.	woodland pool	74
Natick	4	16-Apr	26 Barnsdale Rd.	woodland pool	74a
Natick	4	24-Apr	26 Barnsdale Rd.	woodland pool	74a
Westboro	4	11-Apr	Powder Hill Way #44	Swamp	195
Westboro	4	24-Apr	Powder Hill Way #44	Swamp	195
Westboro	4	16-Apr	Lydia's Way	woodland pool	
Westboro	4	24-Apr	Lydia's Way	woodland pool	
Westboro	4	16-Apr	Nipmuck Dr.	woodland pool	143B
Westboro	4	24-Apr	Nipmuck Dr.	woodland pool	143B
Boxboro	2	16-Apr	Mass Ave pole 100	wet area	82
Boxboro	2	25-Apr	Mass Ave pole 100	wet area	82
Boxboro	2	16-Apr	Mass Ave off pole 78	woodland pool	85
Boxboro	2	25-Apr	Mass Ave off pole 78	woodland pool	85
Boxboro	2	16-Apr	Stow Rd. #450		9
Boxboro	2	25-Apr	Stow Rd. #450		9
Milford	4	15-Apr	Highland St.181	Temporary	37
Milford	4	25-Apr	Highland St.181	Temporary	37
Milford	4	15-Apr	Highland St. 175	Temporary	38a
Milford	4	25-Apr	Highland St. 175	Temporary	38a
Millbury	5	18-Apr	Millbury Ave.	woodland pool	78
Millbury	5	25-Apr	Millbury Ave.	woodland pool	78
Millbury	5	18-Apr	Riverlin Pkwy pole 2	Swamp	102
Millbury	5	25-Apr	Riverlin Pkwy pole 2	Swamp	102
Sherborn	4	17-Apr	Bogastow Brook Rd.	woodland pool	21
Sherborn	4	25-Apr	Bogastow Brook Rd.	woodland pool	21
Stow	2	24-Apr	Timberedge Rd.	woodland pool	78
Stow	2	25-Apr	Timberedge Rd.	woodland pool	78
Stow	2	24-Apr	Timberedge Rd.	Swamp	77
Stow	2	25-Apr	Timberedge Rd.	Swamp	77
Lancaster	2	17-Apr	Brockleman Rd.pole 35	Swamp	
Lancaster	2	28-Apr	Brockleman Rd.pole 35	Swamp	

Lancaster	2	17-Apr	Main St. pole 248	Swamp	
Lancaster	2	28-Apr	Main St. pole 248	Swamp	
Ashland	4	17-Apr	Summer St. #82	woodland pool	23
Ashland	4	30-Apr	Summer St. #82	woodland pool	23
Ashland	4	1-Apr	Edgewood Rd.	woodland pool	101b
Ashland	4	20-Apr	Edgewood Rd.	woodland pool	101b
Ashland	4	1-Apr	Edgewood Rd.	Swamp	86
Ashland	4	30-Apr	Edgewood Rd.	Swamp	86
Acton	2	23-Apr	Charter Rd.# 68	wet area	108
Acton	2	1-May	Charter Rd.# 68	wet area	108
Acton	2	23-Apr	Agawam Rd pole #2	Swamp	115
Acton	2	1-May	Agawam Rd pole #2	Swamp	115
Ayer	2	25-Apr	Westford Rd pole # 142/1	Swamp	17
Ayer	2	1-May	Westford Rd pole # 142/1	Swamp	17
Ayer	2	25-Apr	Westford Rd. opp pole 103/2	Swamp	25
Ayer	2	1-May	Westford Rd. opp pole 103/2	Swamp	25
Hopkinton	4	9-Apr	Wedgwood Rd. at Rivervend	woodland pool	134D
Hopkinton	4	1-May	Wedgwood Rd. at Rivervend	woodland pool	134D
Hopkinton	4	9-Apr	Wedgwood Rd. / Cedar St.	woodland pool	134c
Hopkinton	4	1-May	Wedgwood Rd. / Cedar St.	woodland pool	134c
Milford	4	10-Apr	Casey Dr. #14	container	86e
Milford	4	1-May	Casey Dr. #14	container	86e
Milford	4	15-Apr	Reservoir Rd.pole #16	Retention area	34
Milford	4	1-May	Reservoir Rd.pole #16	Retention area	34
Westford	1	7-Apr	2 Pacific Ln.	woodland pool	253D
Westford	1	1-May	2 Pacific Ln.	woodland pool	253d
Westford	1	7-Apr	2 Pacific Ln.	woodland pool	253c
Westford	1	1-May	2 Pacific Ln.	woodland pool	253c
Westford	1	7-Apr	2 Pacific Ln.	woodland pool	253b
Westford	1	1-May	2 Pacific Ln.	woodland pool	253b
Westford	1	7-Apr	2 Pacific Ln.	woodland pool	253b
Westford	1	1-May	2 Pacific Ln.	woodland pool	253b
Westford	1	7-Apr	2 Pacific Ln.	woodland pool	253b
Westford	1	1-May	2 Pacific Ln.	woodland pool	253b
Westford	1	7-Apr	2 Pacific Ln.	woodland pool	253
Westford	1	1-May	2 Pacific Ln.	woodland pool	253
Westford	1	25-Apr	19 April Ln.	flood plain	125
Westford	1	1-May	19 April Ln.	flood plain	125
Westford	1	25-Apr	30 Preservation Way	Swamp	151
Westford	1	1-May	30 Preservation Way	Swamp	151
Stow	2	30-Apr		64 Swamp	91
Stow	2	2-May		64 Swamp	91
Stow	2	30-Apr	Boxboro Rd. pole 53	Swamp	93d
Stow	2	2-May	Boxboro Rd. pole 53	Swamp	93d
Natick	4	26-Mar	4 Deepwoods Rd.	Cattail	53
Natick	4	2-May	4 Deepwoods Rd.	Cattail	53
Natick	4	3-Apr	Pleasant St./Harvard Medical	Cattail	9B
Natick	4	2-May	Pleasant St./Harvard Medical	Cattail	9B
Natick	4	26-Mar	11 Clover Ter.	Swamp	6a
Natick	4	2-May	11 Clover Ter.	Swamp	6a
Dracut	1		68 Old Marsh Hill Rd.	woodland pool	62a
Dracut	1	2-May	68 Old Marsh Hill Rd.	woodland pool	62a
Boxboro	2	25-Apr	Boxboro Rd. opp pole 42	wet area	89a
Boxboro	2	2-May	Boxboro Rd. opp pole 42	wet area	89a

Boxboro	3,4	25-Apr	450 Stow Rd.	ditch	9
Boxboro	3,4	2-May	450 Stow Rd.	ditch	9
Leominster	2	29-Apr	Patriot Cir.	container	117a
Leominster	2	3-May	Patriot Cir.	container	117a
Leominster	2	29-Apr	14 2 Juter Dr	container	117h
Leominster	2	3-May	14 2 Juter Dr	container	117h
Fitchburg	2	2-May	11 Coggshall Park	Swamp	15
Fitchburg	2	5-May	11 Coggshall Park	Swamp	15
Fitchburg	2	2-May	11 Coggshall Park	Swamp	12
Fitchburg	2	5-May	11 Coggshall Park	Swamp	12
Ashland	4	11-Apr	1 Ponderosa Dr	Swamp	11e
Ashland	4	5-May	1 Ponderosa Dr	Swamp	11e
Ashland	4	11-Apr	1 Ponderosa Dr	Swamp	11b
Ashland	4	5-May	1 Ponderosa Dr	Swamp	11b
Ashland	4	11-Apr 4,8	High St., Grycel Park	woodland pool	20
Ashland	4	5-May 4,8	High St., Grycel Park	woodland pool	20
Tewksbury	1	16-Apr	16 Rogers St. opp pole 21	woodland pool	155a
Tewksbury	1	6-May	16 Rogers St. opp pole 21	woodland pool	155a
Marlboro	3	1-May	5 208 Spoonhill Ave	Swamp	38
Marlboro	3	6-May	5 208 Spoonhill Ave	Swamp	38
Marlboro	3	1-May	5 208 Naugler Ave	Swamp	33
Marlboro	3	6-May	5 208 Naugler Ave	Swamp	33
Westford	1	1-May	17 30 Preservation Way	Swamp	151
Westford	1	7-May	17 30 Preservation Way	Swamp	151
Northbridge	5	22-Apr	4 Fowler Rd. pole 27	woodland pool	68
Northbridge	5	7-May	4 Fowler Rd. pole 27	woodland pool	68
Northbridge	5	22-Apr	4 429 Fowler Rd.	pond	66
Northbridge	5	7-May	4 429 Fowler Rd.	pond	66
Lancaster	2	17-Apr	Langer Rd. pole 40	Swamp	
Lancaster	2	7-May	Langer Rd. pole 40	Swamp	
Lancaster	2	17-Apr	Langer Rd. pole 33-37	wet area	
Lancaster	2	7-May	Langer Rd. pole 33-37	wet area	
Hopedale	4	9-Apr	Parklands, Freedom St.	woodland pool	12
Hopedale	4	7-May	Parklands, Freedom St.	woodland pool	12
Hopedale	4	9-Apr	Parklands	woodland pool	14
Hopedale	4	7-May	Parklands	woodland pool	14
Hopedale	4	9-Apr	Parklands, Hazel St.	Swamp	1 E
Hopedale	4	7-May	Parklands, Hazel St.	Swamp	1 E
Boylston	3	30-Apr	Central St. pole 135	Swamp	74
Boylston	3	7-May	Central St. pole 135	Swamp	74
Boylston	3	30-Apr	86 Stiles Rd.	woodland pool	73
Boylston	3	7-May	86 Stiles Rd.	woodland pool	73
Boylston	3	30-Apr	38 Town Spring Dr.	Swamp	30
Boylston	3	7-May	38 Town Spring Dr.	Swamp	30
Ayer	2	1-May	Coffman Way Parking lot	ditch	1
Ayer	2	7-May	Coffman Way Parking lot	ditch	1
Ayer	2	1-May	Snake Hill Rd. pole 28	tire ruts	30
Ayer	2	7-May	Snake Hill Rd. pole 28	tire ruts	30
Sturbridge	5	23-Apr	18 Forest Ln.	woodland pool	
Sturbridge	5	8-May	18 Forest Ln.	woodland pool	
Sturbridge	5	23-Apr	269 New Boston Rd.	woodland pool	35a
Sturbridge	5	8-May	269 New Boston Rd.	woodland pool	35a

Lunenburg	2	5-May	Valley Rd. opp pole 13	Swamp	101
Lunenburg	2	8-May	Valley Rd. opp pole 13	Swamp	101
Lunenburg	2	5-May	Valley Rd. pole 12	Swamp	100
Lunenburg	2	8-May	Valley Rd. pole 12	Swamp	100
Ayer	2	8-May	Opposite Snake Hill Rd./R.R	Swamp	41
Ayer	2	9-May	Opposite Snake Hill Rd./R.R	Swamp	41
Ayer	2	8-May	Opposite Snake Hill Rd./R.R	ditch	42
Ayer	2	9-May	Opposite Snake Hill Rd./R.R	ditch	42
Boxboro	2	2-May	Flagg Hill Rd opp pole 2	wet area	110a
Boxboro	2	12-May	Flagg Hill Rd opp pole 2	wet area	110a
Boxboro	2	2-May	Flagg Hill Rd at pole 16	wet area	109a
Boxboro	2	12-May	Flagg Hill Rd at pole 16	wet area	109a
Fitchburg	2	9-May	5th Mass Trpk. Pole 76	woodland pool	36
Fitchburg	2	12-May	5th Mass Trpk. Pole 76	woodland pool	36
Fitchburg	2	9-May	5th Mass Trpk. Pole 76	wet area	38
Fitchburg	2	12-May	5th Mass Trpk. Pole 76	wet area	38
Berlin	3	9-May	224 Gates Pond Rd.	woodland pool	139
Berlin	3	12-May	224 Gates Pond Rd.	woodland pool	139
Millville	5	2-May	57 Thayer St.	potholes	109
Millville	5	12-May	57 Thayer St.	potholes	109
Millville	5	2-May	119 Lincoln St.	Swamp	114
Millville	5	12-May	119 Lincoln St.	Swamp	114
Webster	5	24-Apr	Wawela Rd.pole 5	Swamp	124
Webster	5	9-May	Wawela Rd.pole 5	Swamp	124
Webster	5	24-Apr	Scenic Ave. opp 47	Swamp	127
Webster	5	9-May	Scenic Ave. opp 47	Swamp	127
Billerica	1	28-Apr	17 Millers Farm Rd.	woodland pool	209a
Billerica	1	12-May	17 Millers Farm Rd.	woodland pool	209a
Ashland	4	24-Mar	Cross St. opp pole 9	woodland pool	107
Ashland	4	12-May	Cross St. opp pole 9	woodland pool	107
Ashland	4	18-Apr	High St./Cross St.	Swamp	12
Ashland	4	12-May	High St./ Cross St.	Swamp	12
Ashland	4	26-Mar	Cross St. opp house 194	woodland pool	16
Ashland	4	12-Apr	Cross St. opp house 194	woodland pool	16
Millville	5	12-May	Chestnut Hill Rd @ pole 107	woodland pool	45a
Millville	5	13-May	Chestnut Hill Rd @ pole 107	woodland pool	45a
Blackstone	5	12-May	Chestnut St. landfill Gate	ditch	35a
Blackstone	5	13-May	Chestnut St. landfill Gate	ditch	35a
Acton	2	6-May	Concord Rd./ Woodlawn Cem.	Swamp	245a
Acton	2	13-May	Concord Rd./ Woodlawn Cem.	Swamp	245a
Acton	2	6-May	Taylor Rd. opp pole 31	Swamp	231
Acton	2	13-May	Taylor Rd. opp pole 31	Swamp	231
Hopkinton	4	6-May	Fruit St. opp pole 96	woodland pool	91a
Hopkinton	4	13-May	Fruit St. opp pole 96	woodland pool	91a
Hopkinton	4	6-May	4-6 Bullmoose Run	woodland pool	96
Hopkinton	4	13-May	4-6 Bullmoose Run	woodland pool	96
Leominster	2	12-May	Elm St. pole 131 1/2	wet area	126
Leominster	2	13-May	Elm St. pole 131 1/2	wet area	126
Littleton	1	5-May	Omega Way @pole13	Swamp	126
Littleton	1	13-May	Omega Way @pole13	Swamp	126
Littleton	1	5-May	Russell St. opp pole 15	woodland pool	35
Littleton	1	13-May	Russell St. opp pole 15	woodland pool	35

Littleton	1	5-May	Russell St. @pole 2	wet area	185
Littleton	1	13-May	Russell St. @pole 2	wet area	185
Stow	2	7-May	Wheeler Rd. opp pole 3	woodland pool	27
Stow	2	14-May	Wheeler Rd. opp pole 3	woodland pool	27
Stow	2	7-May	Wheeler Rd. @ pole 5	woodland pool	29
Stow	2	14-May	Wheeler Rd. @ pole 5	woodland pool	29
Lancaster	2	7-May	429 Goss Ln.	wet area	
Lancaster	2	14-May	429 Goss Ln.	wet area	
Lancaster	2	7-May	Maple St./Atlantic Union Coll.	tires	
Lancaster	2	14-May	Maple St./Atlantic Union Coll.	tires	
Lancaster	3	7-May	4 Green St. pole 17	Swamp	14
Lancaster	3	14-May	4 Green St. pole 17	Swamp	14
Boylston	3	7-May	4 Mile Hill Rd. pole 65	Swamp	3a
Boylston	3	14-May	4 Mile Hill Rd. pole 65	Swamp	3a
Sturbridge	5	8-May	3 Cooper Rd. pole 11	woodland pool	109
Sturbridge	5	14-May	3 Cooper Rd. pole 11	woodland pool	109
Sturbridge	5	8-May	5 7 Vinton Rd.	woodland pool	253
Sturbridge	5	14-May	5 7 Vinton Rd.	woodland pool	253
Lunenburg	2	13-May	5 Goodrich St. @ pole 13	Swamp	7
Lunenburg	2	15-May	5 Goodrich St. @ pole 13	Swamp	7
Natick	4	2-May	11 12 Sundance Way	Swamp	11
Natick	4	15-May	11 12 Sundance Way	Swamp	11
Dracut	1	8-May	5 New Boston Rd. pole 7	woodland pool	60a
Dracut	1	16-May	5 New Boston Rd. pole 7	woodland pool	60a
Clinton	3	5-May	5 Gorham Ave.	woodland pool	119
Clinton	3	16-May	5 Gorham Ave.	woodland pool	119
Boxboro	2	12-May	5 Depot Rd.opp pole 44	Swamp	149
Boxboro	2	16-May	5 Depot Rd.opp pole 44	Swamp	149
Boxboro	2	12-May	6 Depot Rd. house #685	wet area	117
Boxboro	2	16-May	6 Depot Rd. house #685	wet area	117
Southboro	3	5-May	11 Crystal Pond Rd. opp pole 6	Swamp	67
Southboro	3	16-May	11 Crystal Pond Rd. opp pole 6	Swamp	67
Southboro	3	29-Apr	11 Oland Rd. house #1	Retention area	67a
Southboro	3	16-May	11 Oland Rd. house #1	Retention area	67a
Millville	5	6-May	1 Carriage Estates	woodland pool	9
Millville	5	16-May	1 Carriage Estates	woodland pool	9
Millville	5	2-May	3 Thayer St.poles 243-227	woodland pool	99
Millville	5	16-May	3 Thayer St.poles 243-227	woodland pool	99
Millville	5	2-May	3 Esty St. opp pole 5	Swamp	115
Millville	5	16-May	3 Esty St. opp pole 5	Swamp	115
Acton	2	13-May	3 Hammond St. house 13	Swamp	205
Acton	2	20-May	3 Hammond St. house 13	Swamp	205
Westford	1	14-May	16 2 Wagon Trail	woodland pool	230a
Westford	1	20-May	16 2 Wagon Trail	woodland pool	230a
Westford	1	7-May	15 Carlisle Rd. pole 4	woodland pool	136
Westford	1	20-May	15 Carlisle Rd. pole 4	woodland pool	136
Dracut	1	16-May	2 Fourth St. #63	container	
Dracut	1	21-May	2 Fourth St. #63	container	
Westford	1	20-May	3 Briarwood Dr. behind 5,7,9	woodland pool	181a
Westford	1	22-May	3 Briarwood Dr. behind 5,7,9	woodland pool	181a
Wilmington	1	19-May	14 Apache Way	woodland pool	189
Wilmington	1	23-May	14 Apache Way	woodland pool	189

Northboro	3	16-Sep	Green St. opp. Pole 331	woodland pool	
Northboro	3	23-Sep	Green St. opp. Pole 331	woodland pool	
Northboro	3	16-Sep	Reservoir St./Castle Rd.	ditch	34
Northboro	3	23-Sep	Reservoir St./Castle Rd.	ditch	34
Shrewsbury	3	19-Sep	Reservoir St. opp.house 88	Swamp	120a
Shrewsbury	3	23-Sep	Reservoir St. opp.house 88	Swamp	120a
Auburn	5	19-Sep	West St. opp. House 70	woodland pool	56
Auburn	5	22-Sep	West St. opp. House 70	woodland pool	56
Hopkinton	4	16-Sep	Wilson Rd. at pole 27	potholes	64
Hopkinton	4	23-Sep	Wilson Rd. at pole 27	potholes	64
Hopkinton	4	16-Sep	Cedar St. Ext. house 5	Swamp	75f
Hopkinton	4	23-Sep	Cedar St. Ext. house 5	Swamp	75f
Hopkinton	4	16-Sep	Fruit St. left of pole 49		88
Hopkinton	4	23-Sep	Fruit St. left of pole 49		88

PRE	POST	PESTICIDE APPLIED	PESTICIDE AMOUNT	1ST INSTAR	2ND INSTAR	3RD INSTAR
x		VectoG	3 lbs	x		
	x		-			
x		VectoG	8 lbs	x	x	x
	x					
x		VectoG	1 lb	x		
	x					
x		VectoG	6 lbs	x	x	
	x					
x		VectoG	4 lbs	x	x	
	x					
x		VectoG		x	x	
	x					x
x		VectoG	3 lbs	x		
	x					x
x		VectoG	3 lbs	x		
	x					
x		VectoG	15 lbs		x	x
	x					
x		VectoG	1.5 lbs	x	x	
	x					
x		VectoG	4 lbs	x	x	
	x					
x		VectoG	14 lbs	x	x	x
	x					
x		VectoG	4 lbs	x	x	x
	x					
x		VectoG	13 lbs	x	x	x
	x					
x		VectoG	8 lbs	x	x	
	x					
x		VectoG	1 lb		x	x
	x					
x		VectoG	2 lbs			
	x					
x		VectoG	12 lbs		x	
	x					
x		VectoG	10 lbs		x	x
	x					
x		VectoG	6 lbs	x	x	
	x			x	x	x
x		VectoG	6 lbs	x	x	
	x					
x		VectoG	10 lbs	x	x	
	x					
x		VectoG	8 oz.	x	x	
	x					
x		VectoG	5 lbs	x		
	x					
x		VectoG	1 lb	x	x	
	x					

x		VectoG	24 lbs	x	x	x
x	x	VectoG	24 lbs	x	x	x
x	x	VectoG	46 lbs	x	x	x
x	x	VectoG	5 lbs	x	x	x
x	x	VectoG	20 lbs	x	x	x
x	x	VectoG	40 lbs	x	x	x
x	x	VectoG	6 lbs		x	x
x	x	VectoG	10 lbs			x
x	x	VectoG	24 lbs		x	x
x	x	VectoG	6 lbs		x	x
x	x	VectoG	6 lbs	x	x	
x	x	VectoG	6 lbs	x		
x	x	VectoG	5 lbs	x	x	x
x	x	VectoG	4 lbs			x
x	x	VectoG	14 lbs	x	x	x
x	x	VectoG	1.5 lbs	x	x	
x	x	VectoG	.5 lbs	x	x	
x	x	VectoG	4 lbs			x
x	x	VectoG	5 lbs		x	x
x	x	VectoG	3 lbs		x	
x	x	VectoG	10 lbs		x	x
x	x	VectoG	16 lbs	x	x	x
x	x	VectoG	10 lbs	x	x	x
x	x	VectoG	10 lbs			
x	x	VectoG	12 lbs			
x	x	VectoG	8 lbs	x	x	

x		VectoG	4 lbs	x	x	
	x					
x		VectoG	4lbs	x	x	
	x					
x		VectoG	2 lbs	x	x	
	x					
x		VectoG	4 lbs	x	x	
	x					
x		VectoG	.25 lbs		x	
	x					
x		Agnique	.25 Gal			x
	x					
x		Agnique	14 oz.			
	x					
x		VectoG	14 lbs		x	x
	x					
x		VectoG	8 lbs	x	x	x
	x					
x		VectoG	4 lbs	x	x	
	x					
x		VectoG	.5 lbs	x	x	
	x					
x		VectoG	6 lbs			x
	x					
x		VectoG	2 lbs	x		
	x					
x		VectoG	3 lbs	x		
	x					
x		VectoG	4lbs	x		
	x					
x		VectoG	4 oz.	x		
	x					
x		VectoG	4 oz.	x		
	x	VectoG	2 oz.	x	x	
x		VectoG	4 lbs	x	x	
	x					
x		Agnique	16 oz.		x	x
	x	VectoG	3 lbs			x
x		VectoG	4 lbs		x	
	x					
x		VectoG	10 lbs	x	x	x
	x					
x		VectoG	1 lb	x		
	x					
x		VectoG	.5 lbs	x	x	
	x					
x		VectoG	4 lbs	x		
	x					
x		VectoG		x	x	
	x					
x		VectoG	1 lb		x	x
	x					

x		VectoG	4 lbs				x
	x						
x		VectoG	7 oz.			x	x
	x						
x		VectoG	2 oz.	x			
	x						
x		VectoG	10 lbs	x	x		x
	x						
x		VectoG	1 lb 6 oz.	x			
	x						
x		VectoG	5 lbs	x	x		
	x						
x		VectoG	1 lb	x	x		x
	x						
x		VectoG	6 lbs	x	x		
	x						
x		VectoG	8 oz.	x	x		
	x						
x		VectoG	4 lbs				x
	x						
x		VectoG	3 lbs				x
	x						
x		VectoG	3 lbs				x
	x						
x		Agnique	2 oz.				
	x					x	
x		VectoG	16 lbs				
	x						
x		VectoG	3.75 lbs	x	x		
	x						
x		VectoG	10 lbs	x	x		x
	x						
x		VectoG	8 lbs	x	x		x
	x	VectoG	8 lbs	x			
x		VectoG	2 lbs	x			
	x						
x		VectoG	12 lbs	x			
	x						
x		VectoG	8 lbs				
	x						
x		VectoG	10 lbs				
	x						
x		VectoG	5 lbs				x
	x						
x		VectoG	3 lbs	x	x		
	x						
x		VectoG	4 lbs	x	x		
	x						
x		VectoG	2 lbs				x
	x						
x		Agnique	16 oz.				
	x						

x		VectoG	10 lbs		x	x
	x					
x		VectoG	6 lbs	x	x	
	x					
x		VectoG	15 lbs	x	x	
	x					
x		Agnique	16 oz.	x	x	x
	x					
x		VectoG	.5 lbs			x
	x					
x		VectoG	.5 lbs	l		x
	x					
x		Agnique	16 oz.			
	x					
x		VectoG	4 lbs	x	x	
	x					
x		VectoG	10 lbs			x
	x					x
x		VectoG	2 lbs	x		
	x					
x		Agnique	1 Gal.			
	x					
x		VectoG	12 lbs	x	x	x
	x					
x		Agnique	32 oz.			
	x					
x		VectoG	5 lbs	x	x	
	x					
x		VectoG	6 lbs	x		
	x	VectoG	5 lbs	x	x	
x		VectoG	6 lbs	x	x	x
	x	VectoG	6 lbs	x	x	
x		VectoG	2.5 lbs	x		
	x	VectoG	3 lbs	x	x	
x		VectoG	.5 lbs	x	x	
	x					x
x		VectoG	1 lb		x	x
	x					
x		VectoG	2 lbs			x
	x					
x		VectoG	3.25 lbs			x
	x					
x		VectoG	6 lbs	x	x	
	x					
x		VectoG	7 lbs	x	x	
	x					
x		VectoG	1 lb	x	x	
	x					
x		VectoG	4 lbs		x	x
	x					
x		VectoG	12 lbs 8 oz.	x	x	
	x					

x		VectoG	40 lbs	x	x	
	x	VectoG	9 lbs	x	x	x
x	x	VectoG	2 lbs		x	
x	x	VectoG	.5 lbs	x		
x	x	VectoG	.25 lbs		x	
x	x	Agnique	40 oz.			
x	x	VectoG	2 lbs		x	x
x	x	Agnique	96 oz.			
x	x	VectoG	2 lbs	x	x	x
x	x	Agnique	16 oz.			
x	x	VectoG	2 lbs	x	x	
x	x	Agnique	16 oz.			x
x	x	VectoG	26 lbs		x	x
x	x	VectoG	2 lbs	x	x	x
x	x	VectoG	.5 lbs		x	x
x	x	VectoG	3 lbs		x	
x	x	VectoG	4 lbs			x
x	x	VectoG	2 lbs	x	x	
x	x	VectoG	2 lbs		x	x
x	x	Agnique	32 oz.			x
x	x	VectoG	1 lb		x	x
x	x	Agnique	2 oz.			x
x	x	VectoG	1 lb			x
x	x	VectoG	1 oz.	x	x	x
x	x	Agnique	40 oz.			
x	x	Agnique	1 Gal.			
x	x	VectoG	6 lbs		x	x

x		VectoG	6 lbs			
	x					
x		VectoG	2 lbs			x
	x					
x		VectoG	3 lbs			x
	x					
x		Agnique	32 oz.			
	x					
x		VectoG	2 lbs	x	x	
	x					
x		VectoG	4 lbs	x	x	
	x					
x		VectoG	6 lbs		x	x
	x					

4TH INSTAR	PUPAE	#/DIP	WEATHER	SURVEYED BY	ADD'L COMMENTS	LARVAL ID
		10+		Briggs		
		0		TM		
		7		Briggs		
		0		TM		
		6		Pojani		
		0		TM		
		6		Pojani		
		0		TM		
		6		Pojani		
		0		TM		
		6		Pojani		
x		2		TM	parts looked untreated	
		3		Begin		
		1		TM	sections looked untreated	
		3		Begin		
		0		TM		
		3		Briggs		
		0		TM		
		10		Briggs		
		0		TM		
		3		Briggs		
		0		TM		
		10+		Briggs		
		0		TM		
		8		Briggs		
		0		TM		
		6		Briggs		
		0		TM		
		4		Briggs		
		0		TM		
		3		Briggs		
		0		TM		
x		3		Briggs		
		0		TM		
		4		St. Germain		
		0		TM		
		3		St. Germain		
		0		TM		
		6		Pojani		
		20		Pojani		
		6		Pojani		
		0		Pojani		
		6		Healy		
		0		Healy		
		10		Healy		
		0		Healy		
		8		Healy		
		0		Healy		
		20		Pojani		
		0		Pojani		

	20	Pojani
	0	Pojani
	10+	Nichols
x	1	Nichols
	10+	Nichols
x	1	Nichols
	30	Pojani
	0	Pojani
	10	Swinerton
	0	Swinerton
	10	Swinerton
	0	Swinerton
	5	Nichols
	0	Nichols
x	10	Nichols
	0	Nichols
	10+	Nichols
	0	Nichols
	10+	Nichols
	0	Nichols
	6	Pojani
	0	Pojani
	6	Pojani
	0	Pojani
	8	Briggs
	0	Briggs
x	3	Briggs
	0	Briggs
	10+	Briggs
	0	Briggs
	10	Greite
	0	Greite
	10	Greite
	0	Greite
x	10	Greite
	0	Greite
	5	Briggs
	0	Briggs
	4	Briggs
	0	Briggs
	3	Nichols
	0	Nichols
	10+	Nichols
	0	Nichols
	10 lbs	Pojani
	0	Pojani
x	4	Healy
	0	Healy
x	3	Healy
	0	Healy
	10	Greite
	0	Greite

		6	Greite	
		0	Greite	
		6	Pojani	
		0	Pojani	
		6	Pojani	
		0	Pojani	
		5	Pojani	
		0	Pojani	
		3	Greite	
		0	Greite	
x	x	5	Greite	
		0	Greite	
x	x	7	Healy	
		0	Healy	
x		4	Healy	
		0	Healy	
		8	Pojani	
		0	Pojani	
		6	Pojani	
		0	Pojani	
		7	Briggs	
		0	Briggs	
x		4	Briggs	
		0	Briggs	
		3	macneil	
		0	macneil	
		3	macneil	
		0	macneil	
		4	macneil	
		0	macneil	
		4	macneil	
		0	macneil	
		6	macneil	
		2	macneil	
		4	macneil	
		0	macneil	
x	x	20-30	macneil	1 larvae/6 dips
x		4	macneil	
		3	Healy	
		0	Healy	
		10	Healy	
		0	Healy	
		4	Pojani	
		0	Pojani	
		10	Pojani	
		0	Pojani	
		3	Pojani	
		0	Pojani	
		4	macneil	
		0	macneil	
		7	Greite	
		0	Greite	

x		10	Greite
		0	Greite
x		5	Greite
		0	Greite
		20+	Greite
		0	Greite
		10	Healy
		0	Healy
		5	Healy
		0	Healy
		6	Pojani
		0	Pojani
		5	Pojani
		0	Pojani
		6	Pojani
		0	Pojani
		8	macneil
		0	macneil
		2	St. Germain
		0	St. Germain
		5	St. Germain
		0	St. Germain
x		4	macneil
		0	macneil
x	x	3	Nichols
		1	Nichols
x	x	3	Nichols
		0	Nichols
		8	Greite
		0	Greite
		3	Greite
		0	Greite
		7	Pojani
		6	Pojani
		4	Pojani
		0	Pojani
		5	Pojani
		0	Pojani
x		4	St. Germain
		0	St. Germain
x		10	St. Germain
		0	St. Germain
		2	St. Germain
		0	St. Germain
		10	Healy
		0	Healy
		6	Healy
		0	Healy
x		5	Nichols
		0	Nichols
x	x	10+	Nichols
		0	Nichols

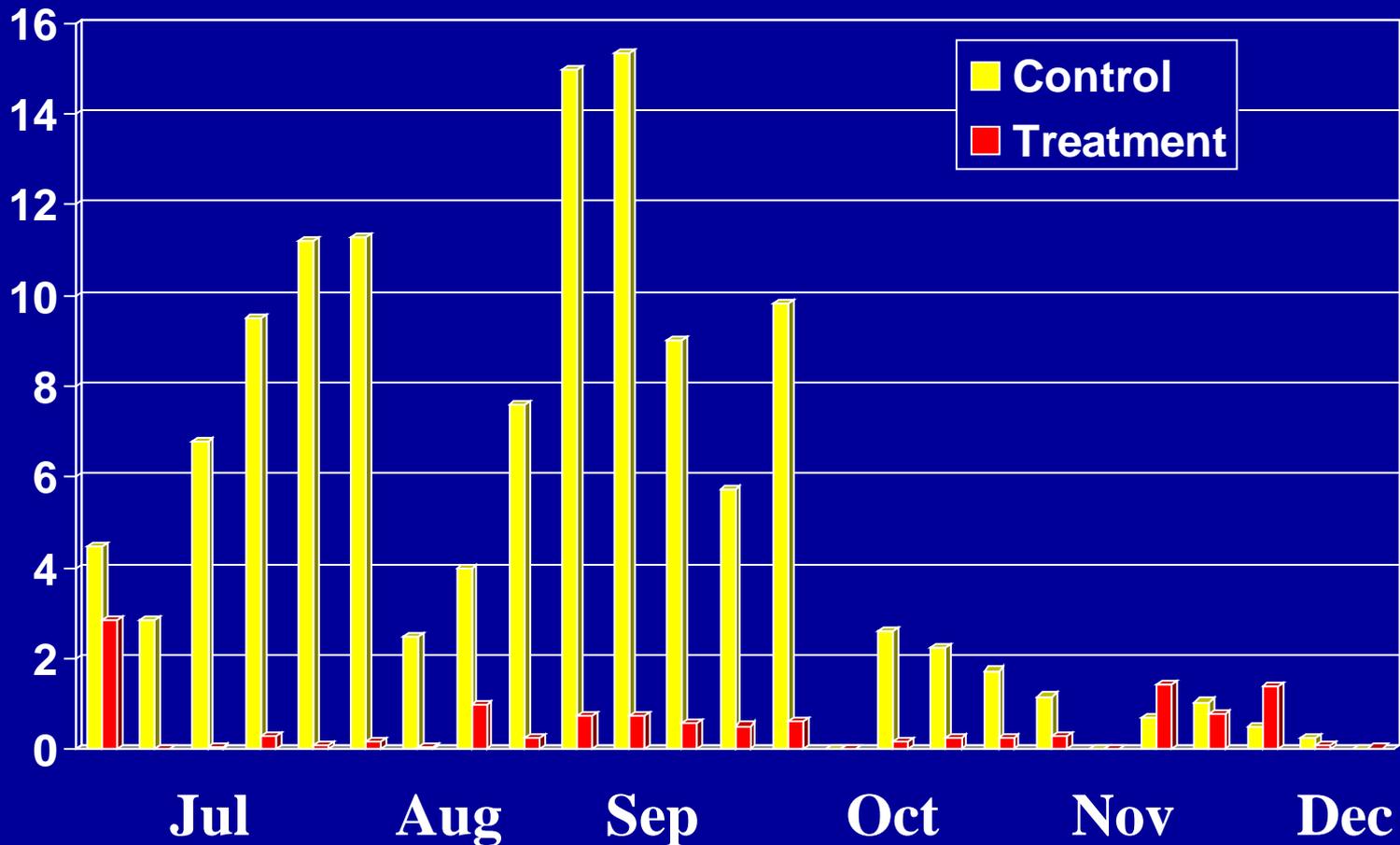
		5	Healy	
		0	Healy	
		10	Healy	
		0	Healy	
		10	Healy	
		0	Healy	
x	x	15	Healy	
		0	Healy	
		1	Greite	
		0	Greite	
x		2	Greite	
		0	Greite	
x	x	5	Healy	
		0	Healy	
		?	Healy	
		0	Healy	
x		8	Allard	
x		5	Allard	very active larvae, will recheck
		10+	Nichols	
		0	Nichols	
x	x	5	Nichols	
		0	Nichols	
		3	Nichols	
		nb	Nichols	
x	x	20+	Nichols	
		0	Nichols	
		3	macneil	
		0	macneil	
		5	Pojani	
		6	Pojani	
		20	Pojani	
		6	Pojani	
		20	Pojani	
		6	Pojani	
		8	Nichols	
		5	McGlinchy	ockets appeared untreated
		3	Swinerton	
		0	McGlinchy	
x		20	Greite	
		0	Greite	
		4	Greite	
		0	Greite	
		6	Pojani	
		0	Pojani	
		5	Pojani	
		0	Pojani	
		4	Healy	
		0	Healy	
		3	macneil	
		0	macneil	
		3	macneil	
		0	macneil	

		5	macneil
		0	macneil
		5	Healy
		0	Healy
			Healy
		0	Healy
		3	Greite
		0	Greite
		15	Greite
		0	Greite
	x		St. Germain
		0	St. Germain
		2	St. Germain
		0	St. Germain
x	x	10	Nichols
		0	Nichols
		7+	Nichols
		0	Nichols
	x	13	Healy
		0	Healy
		6	Pojani
		0	Pojani
x	x	15	macneil
		0	macneil
		20+	Allard
		0	Allard
x		3	Greite
		0	Greite
		8	Greite
		0	Greite
		2	St. Germain
		0	St. Germain
x		3	St. Germain
		0	St. Germain
		5	Nichols
		0	Nichols
		5+	Nichols
		0	Nichols
x	x	5+	Nichols
		0	Nichols
		7	Greite
		0	Greite
	x	10	macneil
		0	macneil
x		2	macneil
	x	2	macneil
		25	macneil
		0	macneil
	x	2	macneil
	x	2	macneil
		2	macneil
		0	macneil

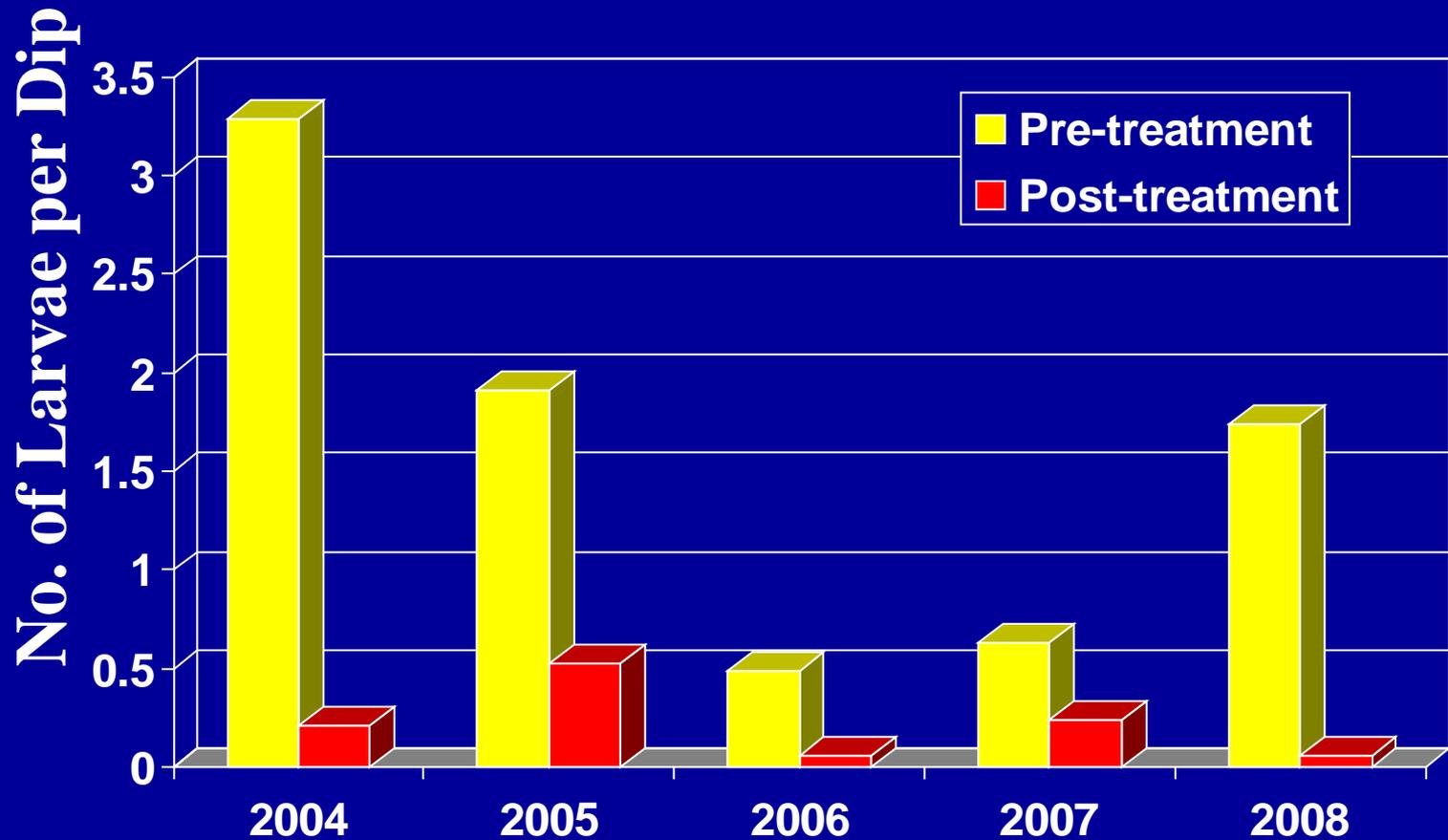
x		2	St. Germain
		0	McGlinchy
		2	St. Germain
		0	McGlinchy
x		2	St. Germain
		0	McGlinchy
x	x	10+	Nichols
		0	McGlinchy
		8	Pojani
		0	McGlinchy
		4	Pojani
		0	McGlinchy
x		10	Pojani
		0	McGlinchy

Effect of Vectolex WSP against *Culex pipiens/restuans* larvae in Newton catchbasins

No. of Larvae and Pupae per Dip



Efficacy of Aerial *Bti* Applications



5 Fall Lane/Mosq Control 03

	20-Jun-05	21-Jun-05		22-Jun-05	23-Jun-05
Low Temp	48	52		43	52
TOTAL NUMBER expected value	448	2013		1700	190
TOTAL NUMBER	12	43		26	7

Treatment Control

PER		15		8	28
CAN	16	53		66	23
PUNCT	1				
TRI					
CIN	11	23		62	3
VEX	303	1755		1380	75
MEL	2	1			1
TVT	109	150		170	55
CTT					
JAP					
EXC	4	8		13	2
PIP/RES	2	8			3
SAL					
SAP					
AUR					
FER				1	
ABS					
QUA					
WAL					
<hr/>					
	448	2013		1700	190
PER		2		1	2
CAN					
PUNCT	1				
TRI					
CIN					
VEX	10	40		23	4
MEL					
TVT					
CTT					
JAP					
EXC					
PIP/RES	1	1		2	1
SAL					
SAP					
AUR					
FER					
ABS					
QUA					
WAL					
<hr/>					
	12	43		26	7

Norfolk County Mosquito Control

Larval Surveillance report

Town: <u>Dedham</u>				Employee Name(s) <u>Chris</u>								
Date: <u>8/9/04</u>				Weather Conditions: <u>80° Sunny</u>								
Location: <u>Patty Lee Ln</u>				<u>Patty Lee Ln</u>			<u>Patty Lee Ln</u>					
Wetl. type:												
	1st - 3rd	4th	pupae	1st - 3rd	4th	pupae	1st - 3rd	4th	pupae	1st - 3rd	4th	pupae
Dip 1	18	6	0	0	0	0	0	0	0			
Dip 2	0	0	0	0	0	0	0	0	0			
Dip 3	1	0	0	7	9	0	?	X	3			
Dip 4	0	0	0	0	0	0	8	13	1			
Dip 5	0	0	0	8	0	0	5	8	6			
Dip 6	0	0	0	0	0	1	0	0	0			
Dip 7	0	0	0	0	0	0	0	0	0			
Dip 8	0	0	0	0	0	0						
Dip 9	0	0	0	0	0	0						
Dip 10	0	0	0	0	0	0						
Total:	19	0	0	7	9	1	13	21	10			
Average:	19	/10 =	1.9	17	/10 =	1.7	44	/10 =	4.3			/10 =
Treatment:												
Quantity:							TOTAL					
Comments:							80 / 27 = 2.96			③		

Wetland Types

- WS1 Forrested Swamp - deciduous
- WS2 Forrested Swamp - cedar
- SS Shrub Swamp
- M Marsh
- SM Salt Marsh

POST-MONITORING

PROJECT COMPLETION DATE: 3/13/07

6 MONTH REVIEW 6/29/07

PHOTOS

MOSQUITO BREEDING

DITCH STABILIZATION -SOME ISSUES SEE BELOW

NONE

COMMENTS: SOILS WERE SPREAD WHILE PARTIALLY FLOODED

10+ DIPS - NO LARVAE

EXCAVATION TOOK PLACE DURING PARTIAL FROST CONDITIONS

POSSIBLE CAUSE OF EROSION & UNDERCUTTING

CONTINUE TO CHECK & HC THIS FALL TO SEE IF LARGER ISSUE

1 YEAR REVIEW 1/30/08

PHOTOS

MOSQUITO BREEDING

DITCH STABILIZATION IMPROVED - VEGETATION

COMMENTS: CHANNELS MOSTLY CLEAR OF DEBRIS

WATER FLOWING

AT TIME OF VISIT

GROWING SEASON
2 YEAR REVIEW 7/7/08

PHOTOS

MOSQUITO BREEDING

DITCH STABILIZATION OKAY

NONE ✓

COMMENTS: LOW AREA DRAINING OFF PROPERLY - NO LONGER

CONDUCTIVE TO LARVAL MOSQUITO DEVELOPMENT

CONT TO HAND CLEAN (EVERY YEAR OR TWO)

ANVIL 10+10[®] Ground ULV Caged Field Trial
June 17- 20, 2001
Norfolk County Mosquito Control Program
Norwood, Massachusetts
And
Clarke Mosquito Control Research & Development

Ground ULV field trials were conducted with Anvil 10+10 and Scourge 18/54 in Norwood, Massachusetts in cooperation with the Onondaga County Vector Mosquito Control Program to determine efficacy comparisons.

Products: Anvil 10+10 - .0012# AI/acre
Scourge 18/54 - .00175#AI/acre

Both products were diluted with BVA-13 mineral oil and applied at a rate of

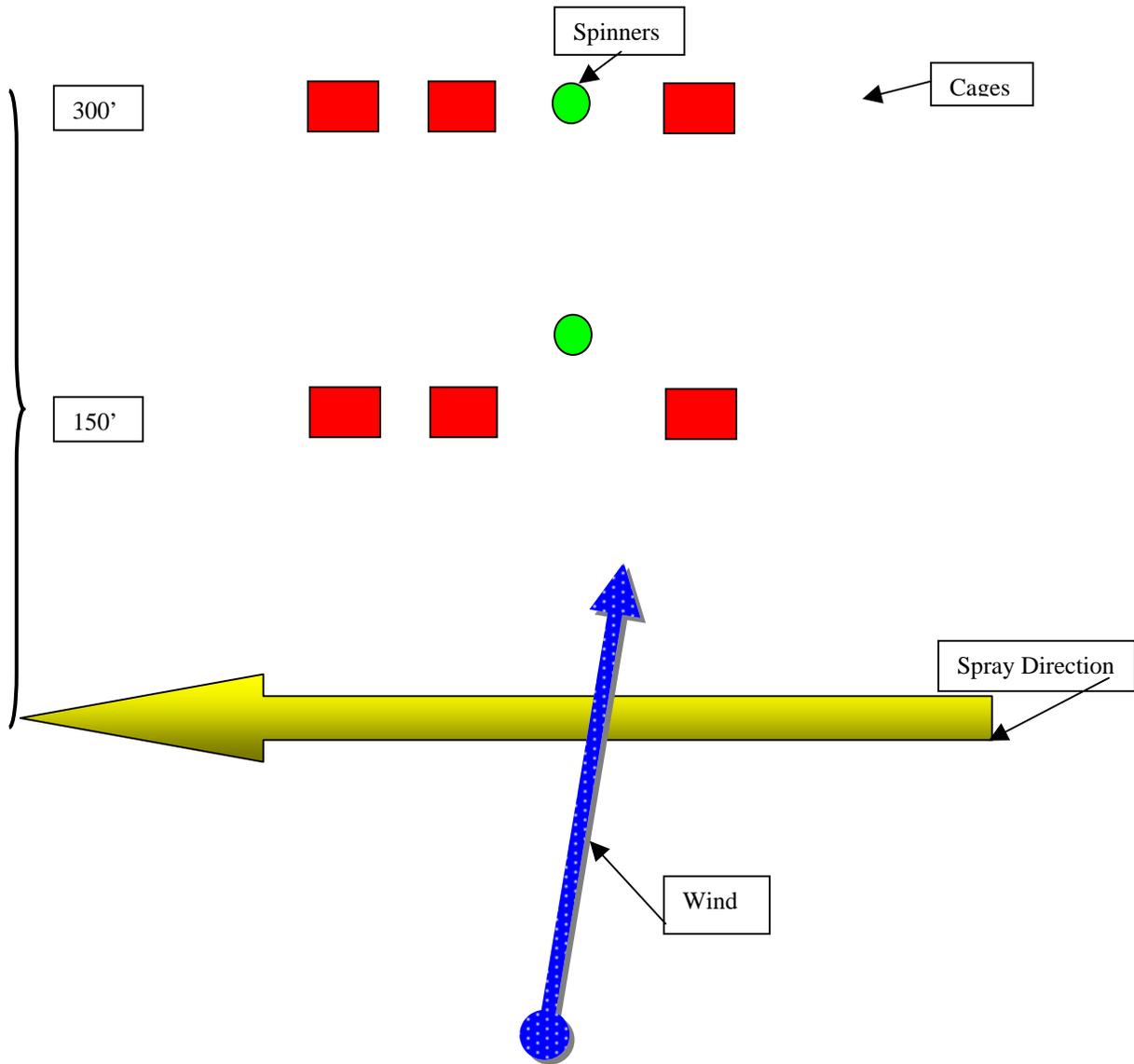
1. Anvil 10+10 – 1:1 at 2.5 oz/min
2. Scourge 18/54 – 1:4.5 at 3 oz/min

On June 27, 2000 a Leco 1600 HD cold aerosol sprayer was calibrated and characterized using an AIMS machine prior to the trial. Spinners were also placed at the site along side the caged mosquitoes and droplets were collected. Mosquitoes were collected via CO₂ baited traps. Species tested were *Oc. canadensis*, *Oc. sollicitans*, and *Aedes vexans*. Mosquitoes were mouth aspirated into spray cages, treated and allowed 10 minutes exposure then transferred to clean cages for knockdown and mortality monitoring. Once transferred, mosquitoes were monitored for 24 hours for mortality.

Weather data was recorded at the site at the time of application. Winds were SSW at 0-2 mph and temperatures ranged from 63-70⁰ F.

The trial took place at a golf course and was approximately 1.5 acres in size.

Site Diagram



RESULTS:

ANVIL 10+10 @ .0012# AI/acre

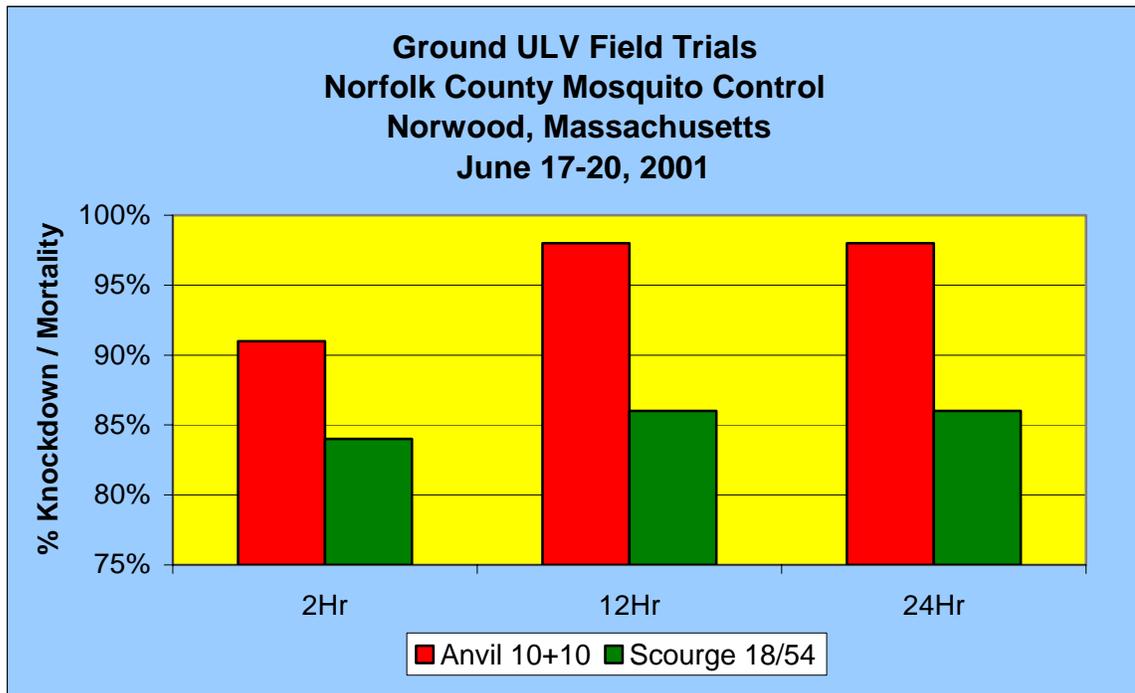
MMD: 15.5 μ (AIMS)

REP	% 2 hr. Knockdown	% 12 hr. Knockdown	% 24 hr. Mortality
1	90%	95%	96%
2	91%	100%	100%
3	93%	98%	98%
CONTROL	0%	3%	3%

SCOURGE 18/54 @ .00175# AI/acre

MMD: 14.5 μ (AIMS)

REP	% 2 hr. Knockdown	% 12 hr. Knockdown	% 24 hr. Mortality
1	86%	90%	89%
2	65%	69%	72%
3	100%	99%	97%
CONTROL	3%	3%	3%



Anvil 10+10 @ .0012# AI/ Acre					
		Cages 1 - 3 (150')		Cages 4 - 6 (300')	
Rep-1	Knockdown - % Knockdown		Mortality	Total	24 hr %
MMD-18.0 μ	2hr - %	12hr - %	24 hr	Mos.	Mortality
Cage-1	22-96%	22-96%	22	23	96%
2	23-88%	24-92%	24	26	92%
3	26-93%	26-93%	26	28	93%
4	23-87%	26-100%	26	26	100%
5	20-87%	23-100%	23	23	100%
6	19-90%	19-90%	20	21	95%
Rep-2					
MMD-No drops collected					
Cage-1	29-100%	29-100%	29	29	100%
2	27-96%	28-199%	28	28	100%
3	21-88%	24-100%	24	34	100%
4	24-96%	25-100%	25	25	100%
5	25-100%	25-100%	25	25	100%
6	26-97%	29-100%	29	29	100%
Rep-3					
MMD-13.4 μ					
Cage-1	23-96%	24-100%	24	24	100%
2	18-82%	21-95%	21	22	95%
3	26-90%	26-90%	26	29	90%
4	27-96%	28-100%	28	28	100%
5	23-100%	23-100%	23	23	100%
6	25-96%	25-100%	25	25	100%
Control					
Cage-1	0%	0%	0	24	0%
2	0%	0%	0	21	0%
3	0%	1-3%	1	26	3%

Scourge 18/54 @ .00175# Ai/Acre- Cages 1 - 3 (150') Cages 4 - 6 (300')					
Rep-1	Knockdown - % Knockdown		Mortality	Total	24 hr %
MMD-14.6 μ	2hr - %	12hr - %	24 hr	Mos.	Mortality
Cage-1	18-78%	22-96%	22	23	96%
2	22-79%	23-82%	23	28	82%
3	20-83%	20-83%	17	24	71%
4	21-78%	24-89%	25	27	93%
5	24-96%	25-100%	25	25	100%
6	28-100%	28-100%	18	28	100%
Rep-2					
MMD-16.3 μ					
Cage-1	26-100%	24-92%	23	26	88%
2	14-67%	15-71%	16	21	76%
3	23-100%	23-100%	23	23	100%
4	17-63%	18-67%	18	27	67%
5	5-22%	10-43%	12	23	52%
6	10-37%	11-41%	13	27	48%
Rep-3					
MMD-18.2 μ					
Cage-1	28-100%	28-100%	28	28	100%
2	30-100%	30-100%	30	30	100%
3	29-100%	27-93%	25	29	86%
4	26-100%	25-96%	25	26	96%
5	24-100%	24-100%	24	24	100%
6	23-100%	23-100%	23	23	100%
Control					
Cage-1	1-3%	1-3%	1	28	3%
2	1-3%	1-3%	1	28	3%
3	1-4%	1-4%	1	22	4%

Conclusion:

Anvil 10+10 continues to perform superior to Scourge 18/54.

Mechanized Wetland Management: Immature Mosquito Record

Project Identification Name/#: Canton - Wash. St. Sampling Date: 5/19/09
 Mean Immature Mosquito / Site: _____¹ Previous Rain Date: 5/17/09

Dip Station #1

Dip #	#	Instar (if available)				
		1	2	3	4	P
1	0					
2	0					
3	0					

Mean / station: 0
 Notes: looks like could breed a few adults around

Dip Station #2

Dip #	#	Instar (if available)				
		1	2	3	4	P
1	-					
2	-					
3	-					

Mean / station: 0
 Notes: No standing water all skunk cabbage

Dip Station #3

Dip #	#	Instar (if available)				
		1	2	3	4	P
1	-					
2	-					
3	-					

Mean / station: _____
 Notes: No standing water all skunk cabbage + shrubs

Dip Station #4

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____
 Notes: _____

Dip Station #5

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____
 Notes: _____

Dip Station #6

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____
 Notes: _____

Dip Station #7

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____
 Notes: _____

Dip Station #8

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____
 Notes: _____

Dip Station #9

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____
 Notes: _____

Dip Station #10

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____
 Notes: _____

¹ Total # mosquito / Total # all dips = Mean / Site
 Total # mosquito / # dips / station = Mean / Station

Mechanized Wetland Management: Immature Mosquito Record

Project Identification Name/#: 270802

Sampling Date: 5/19/09

Mean Immature Mosquito / Site: _____¹

Previous Rain Date: 5/17/09

Dip Station #1

Dip #	#	Instar (if available)				
		1	2	3	4	P
1	0					
2	0					
3	0					

Mean / station: 0

Notes: Could breed - might be late

Dip Station #2

Dip #	#	Instar (if available)				
		1	2	3	4	P
1	0					
2	0					
3	0					

Mean / station: 0

Notes: Water flowing

Dip Station #3

Dip #	#	Instar (if available)				
		1	2	3	4	P
1	0					
2	0					
3	0					

Mean / station: 0

Notes: Frogs - water will flow when rains come

Dip Station #4

Dip #	#	Instar (if available)				
		1	2	3	4	P
1	0					
2	0					
3	0					

Mean / station: 0

Notes: Looks like vernal pool
lots of frogs. Might breed in early spring

Dip Station #5

Dip #	#	Instar (if available)				
		1	2	3	4	P
1	0					
2	0					
3	0					

Mean / station: 0

Notes: No water - can't find wetland boundary - DEP airphoto interp. mistake

¹ Total # mosquito / Total # all dips = Mean / Site

Total # mosquito / # dips / station = Mean / Station

taken off G. heide map

Dip Station #6

Dip #	#	Instar (if available)				
		1	2	3	4	P
1	0					
2	0					
3	0					

Mean / station: 0

Notes: water flowing fine

Dip Station #7

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____

Notes: _____

Dip Station #8

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____

Notes: _____

Dip Station #9

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____

Notes: _____

Dip Station #10

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____

Notes: _____

Stoughton - Westview Drive Post Monitoring Larval Map
(include ditch as breeding was documented within ditch)



Mechanized Wetland Management: Immature Mosquito Record

Project Identification Name/ #: Weymouth Broad Street DCR Swim pool Sampling Date: 5/26/09
 Mean Immature Mosquito / Site: 1 Previous Rain Date: 5/24/09

Dip Station #1

Dip #	#	Instar (if available)				
		1	2	3	4	P
1	0					
2	0					
3	0					

Mean / station: 0
 Notes: Basically dry stream bed w/ a few puddles.

Dip Station #2

Dip #	#	Instar (if available)				
		1	2	3	4	P
1	0					
2	1					1
3	0					

Mean / station: < 1
 Notes: Prags + marsh.

Dip Station #3

Dip #	#	Instar (if available)				
		1	2	3	4	P
1	0					
2	0					
3	0					

Mean / station: 0
 Notes: Water slowly flowing

Dip Station #4

Dip #	#	Instar (if available)				
		1	2	3	4	P
1	0					
2	0					
3	0					

Mean / station: 0
 Notes: Some woodland pools but evidence of high flow (small falls, grade)

Dip Station #5

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____
 Notes: _____

Dip Station #6

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____
 Notes: _____

Dip Station #7

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____
 Notes: _____

Dip Station #8

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____
 Notes: _____

Dip Station #9

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____
 Notes: _____

Dip Station #10

Dip #	#	Instar (if available)				
		1	2	3	4	P
1						
2						
3						

Mean / station: _____
 Notes: _____

See Notes on Back

¹ Total # mosquito / Total # all dips = Mean / Site
 Total # mosquito / # dips / station = Mean / Station

30 Foundry Road/17 Occident Circle 02

	27-Jun-05	28-Jun-05		29-Jun-05	30-Jun-05
Low Temp	71	71		64	62
TOTAL NUMBER expected value	34	137		309	248
TOTAL NUMBER	113	23		70	76

PER	12	43		137	130
CAN	11	54		95	67
PUNCT				2	1
TRI					
CIN				2	
VEX	7	31		57	37
MEL	1	6		5	4
TVT				2	
CTT					
JAP					
EXC	1	2		8	8
PIP/RES					
SAL					
SAP					
AUR					
FER					
ABS	1				
QUA	1	1		1	1
WAL					
	<hr/>	<hr/>		<hr/>	<hr/>
	34	137		309	248

PER	45	8		8	13
CAN	21	5		31	28
PUNCT	1	1		1	2
TRI					
CIN	3	1		2	1
VEX	30	4		19	22
MEL				3	2
TVT	3	1		2	
CTT					
JAP					
EXC	5	2		3	5
PIP/RES					
SAL				1	
SAP					
AUR					
FER					
ABS					
QUA	5	1			
WAL					
	<hr/>	<hr/>		<hr/>	<hr/>
	113	23		70	76

Control Treatment

220 King Phillip Street/124 Academy Ave 06

	20-Jun-05	21-Jun-05		22-Jun-05	23-Jun-05
Low Temp	48	52		43	52
TOTAL NUMBER expected value	64	123		145	104
TOTAL NUMBER	47	65		202	0

	20-Jun-05	21-Jun-05	22-Jun-05	23-Jun-05
PER	4	43	19	27
CAN	15	24	74	19
PUNCT				
TRI				
CIN	17	3	8	3
VEX	5	22	23	19
MEL	10	19	12	22
TVT	4		1	1
CTT				
JAP				
EXC	4	1	4	4
PIP/RES	3	7	3	9
SAL				
SAP				
AUR	1	3	1	
FER				
ABS	1	1		
QUA				
WAL				
	<hr/>	<hr/>	<hr/>	<hr/>
	64	123	145	104

	20-Jun-05	21-Jun-05	22-Jun-05	23-Jun-05
PER	2	5	13	
CAN		7	16	
PUNCT				
TRI			1	
CIN	14	23	106	
VEX	20	21	36	
MEL	10	3	10	
TVT			1	
CTT			1	
JAP	1		2	
EXC		1	14	
PIP/RES		4	2	
SAL				
SAP				
AUR				
FER				
ABS		1		
QUA				
WAL				
	<hr/>	<hr/>	<hr/>	<hr/>
	47	65	202	0

Treatment Control

INDEX CODES/ABBREVIATIONS/ALPHABETICAL ORDER

2009

- 1 -

Formulation Code	Product	EPA Reg. #
09-1	<u>Altosid® Briquets</u> A sustained release mosquito growth regulator to prevent adult mosquito emergence (1 briquet/ 10' x 10' surface area)	2724-375
09-2	<u>Altosid® XR Extended Residual Briquets.</u> A sustained release mosquito growth regulator to prevent adult mosquito emergence (1 briquet/ 20' x 10' surface area)	2724-421
09-3	<u>Altosid® Pellets</u> Mosquito growth regulator. A granular product to prevent adult mosquito emergence (Apply at 2.5 lbs./acre)	2724-448
09-4	<u>Altosid® Pellets WSP</u> Mosquito growth regulator (Apply one pouch per catch basin)	2724-448
09-5	<u>Anvil® 10X10 ULV</u> . A synthetic pyrethroid for control of adult mosquitoes, for aerial or ground application (Applied in ultra low volume sprayers at a rate of .62 oz. per acre)	1021-1688-8329
09-6	<u>Summit® Briquets</u> Floating sustained-release larvicide for long-term control of mosquito larvae (1 briquet/10'x10' surface area)	6218-47
09-7	<u>Bactimos® 5% Pellets</u> Biological larvicide control of mosquito larvae (Apply 3 to 16lbs. of pellets/acre) (Avg. 5 lbs./acre) (Aircraft or Ground Equip.)	37100-42-2217
09-8	<u>VectoBac® 12 AS Biological Larvicide/Aqueous Suspension</u> (1.25 oz. VectoBec® to 3 gals. diluent (water))	73049-38

PLYMOUTH COUNTY MOSQUITO CONTROL PROJECT

INDEX CODES/ALPHABETICAL ORDER

-2-

Formulation Code	Product	EPA Reg.#
09-9	<u>VectoBac® 12AS Biological Larvicide/Aqueous</u> <u>Suspension</u> 4 oz. VectoBac® to 50 gals. diluent (water) (Hydraulic Tank Truck Mix)	73049-38
09-10	<u>VectoBac® 12AS Biological Larvicide/Aqueous</u> <u>Suspension</u> (1 pt. (16 oz.) VectoBac® to 1 pt. (16 oz.) diluent (water) (Aircraft Mix)	73049-38
09-11	<u>VectoBac®12 AS Biological/Larvicide Aqueous</u> <u>Suspension</u> (1 qt. (32 oz.) VectoBac® to 1 qt. (32 oz.) diluent (water) (Aircraft Mix)	73049-38
09-12	Vectobac®G Biological Larvicide Granules (Apply 2.5 to 10 lbs. of granules/acre) (Avg. 5-10 lbs./acre) (Aircraft or Ground Equipment)	73049-10
09-13	<u>VectoBac® CG Biological Larvicide/Granules</u> (Apply 2.5 to 10 lbs. of granules/acre) (Avg. 5-10 lbs./acre) (Aircraft or Ground Equipment)	73049-19
09-14	<u>VectoLex® CG Biological Larvicide/Granules</u> (Apply 2.5 to 10 lbs. of granules/acre) (Avg. 5-10 lbs./acre) For extended residue control: 10-20 lbs./acre	73049-20
09-15	Duet® Dual Action Adulticide A synthetic pyrethroid for control of adult mosquitoes, for aerial application or ground application (Applied in ultra low volume sprayers at a rate of .62 oz. per acre)	1021-1795- 8329
09-16	Flit™10 EC Permethrin Apply 17.5 fluid ounces of diluted material per acre.	8329-67

PLYMOUTH COUNTY MOSQUITO CONTROL PROJECT

INDEX CODES/ABBREVIATIONS/ALPHABETICAL ORDER

Application Method

- 3 -

Beeco Model 25HD	Ultra Low Volume Sprayer	(truck mounted)	PM
Pump Can Sprayer	(3 gallon Solo)		PC
John Bean Hydraulic Sprayer		(truck mounted)	HS
Hand Applied	(for briquets only) (for granules only)		HA

Amount Abbreviations

GALS., GAL., gals, gal	= gallons (128 fluid ounces)
QTS, QT, qts, qt	= quarts (32 fluid ounces)
OZS, OZ, ozs, oz	= fluid ounces
ACS, AC, acs, ac	= acres
B, b	= storm weather catch basin
F	= Fahrenheit
AVG, avg	= average
SPP, spp	= species
form	= formulation
smp.	= sample
Y, y	= yes
N, n	= no
amt.	= amount
meth.	= method

Town Abbreviations

Abington	=ABG	Marion	= MRN
Bridgewater	=BRI	Marshfield	= MFD
Brockton	=BRO	Mattapoisett	= MAT
Carver	=CAR	Middleboro	= MID
Cohasset	=COH	Norwell	= NOR
Duxbury	=DUX	Pembroke	= PEM
East Bridgewater	=EBW	Plymouth	= PLY
Halifax	=HAL	Plympton	= PLP
Hanover	=HVR	Rochester	= RCH
Hanson	=HAN	Rockland	= ROC
Hingham	=HIN	Scituate	= SCI
Hull	=HUL	Wareham	= WAR
Kingston	=KIN	West Bridgewater	= WBW
Lakeville	=LAK	Whitman	= WHI

Date	Applicator	Town	Site #	Address	name	# Dips	Ave per dip	Instar
5/28/2009	c hanna	bri	47311-1			10	3	2
6/18/2009	c hanna	bri	47311-1			10	0	
4/15/2008	c hanna	bri	47313-1			5	2	3
8/13/2008	c hanna	bri	47313-1			0		
4/27/2009	c hanna	bri	47313-1			10	10	2
5/28/2009	c hanna	bri	47313-1			10	0	
6/18/2009	c hanna	bri	47313-1			10	0	
4/27/2009	c hanna	bri	48322-1			10	2	2
5/26/2009	c hanna	bri	48322-1			10	0	
4/27/2009	c hanna	bri	48322-2			10	7	2
5/26/2009	c hanna	bri	48322-2			10	0	
6/18/2009	c hanna	bri	48322-2			10	0	
4/27/2009	c hanna	bri	48331-1			10	10	2
5/28/2009	c hanna	bri	48331-1			10	0	
6/18/2009	c hanna	bri	48331-1			10	0	
4/3/2008	c hanna	wbw	50322-1			15	3	2
4/22/2008	c hanna	wbw	50322-1			10	0	
5/29/2008	c hanna	wbw	50322-1			10	0	
4/7/2008	c hanna	bri	50411-3			2	3	2
5/1/2008	c hanna	bri	50411-3			15	0	
6/19/2008	c hanna	bri	50411-3			10	0	
7/10/2008	c hanna	bri	50411-3			0		
4/23/2009	c hanna	bri	50411-3			10	3	2
6/10/2009	c hanna	bri	50411-3			10	0	
4/7/2008	c hanna	bri	51413-1			10	2	3
5/1/2008	c hanna	bri	51413-1			15	0	
6/19/2008	c hanna	bri	51413-1			10	0	
8/1/2008	c hanna	ebw	51414-6			5	3	2
5/11/2009	c hanna	ebw	51414-6			10	1	2
5/26/2009	c hanna	ebw	51414-6			10	0	
6/8/2009	c hanna	wbw	52342-1			10	5	2
3/24/2008	c hanna	wbw	52343-1			5	10	1
4/23/2008	c hanna	wbw	52343-1			10	4	3
5/29/2008	c hanna	wbw	52343-1			10	0	
6/16/2008	c hanna	wbw	52343-1			10	0	
4/22/2009	c hanna	wbw	52343-1			10	4	2
6/8/2009	c hanna	wbw	52343-1			10	0	
5/19/2009	c hanna	wbw	52354-1			10	2	2
6/8/2009	c hanna	wbw	52354-1			10	0	
6/9/2009	c hanna	ebw	52371-2			10	4	2
6/30/2009	c hanna	ebw	52371-2			10	0	
7/13/2009	c hanna	ebw	52371-2			10	0	
4/17/2008	c hanna	ebw	52424-2			15	4	3
5/28/2008	c hanna	ebw	52424-2			10	0	
4/27/2009	r goodwin	dux	53553-1			25	2	2
5/11/2009	a tassinari	dux	53553-1			10	0	
6/9/2009	a tassinari	dux	53553-1			10	0	
6/27/2008	a tassinari	dux	53572-1			10	25	3
7/16/2008	a tassinari	dux	53572-1			10	0	
7/31/2008	a tassinari	dux	53572-1			10	5	2
8/18/2008	a tassinari	dux	53572-1			5	5	2

8/26/2008	a tassinari	dux	53572-1	5	5	2
9/19/2008	a tassinari	dux	53572-1	10	5	
9/25/2008	a tassinari	dux	53572-1	10	0	
5/22/2009	a tassinari	dux	53572-1	10	2	3
6/3/2009	a tassinari	dux	53572-1	10	0	
6/19/2009	a tassinari	dux	53572-1	10	0	
6/2/2009	a tassinari	dux	53601-1	10	10	2
6/16/2009	a tassinari	dux	53601-1	10	0	
6/24/2009	a tassinari	dux	53601-1	10	0	
4/1/2008	c hanna	ebw	54381-3	10	10	2
4/17/2008	c hanna	ebw	54381-3	10	10	3
5/28/2008	c hanna	ebw	54381-3	10	0	
4/13/2009	c hanna	ebw	54381-3	10	8	2
5/12/2009	c hanna	ebw	54381-3	10	0	
5/27/2009	c hanna	ebw	54381-3	10	0	
4/17/2008	c hanna	ebw	54381-5	10	8	3
8/19/2008	c hanna	ebw	54381-5	0		
4/13/2009	c hanna	ebw	54381-5	5	2	2
5/12/2009	c hanna	ebw	54381-5	10	0	
5/27/2009	c hanna	ebw	54381-5	10	0	
5/19/2009	a tassinari	dux	54604-2	10	8	3
6/24/2009	a tassinari	dux	54604-2	10	0	
4/2/2008	c hanna	wbw	55321-4	10	10	2
4/23/2008	c hanna	wbw	55321-4	10	0	
5/18/2009	a tassinari	pem	55513-1	10	10	3
5/21/2009	a tassinari	pem	55513-1	10	0	
6/27/2008	a tassinari	dux	55602-2	10	1	2
7/24/2008	a tassinari	dux	55602-2	5	25	2
8/4/2008	a tassinari	dux	55602-2	10	10	2
8/13/2008	a tassinari	dux	55602-2	10	3	2
8/22/2008	a tassinari	dux	55602-2	5	3	2
8/26/2008	a tassinari	dux	55602-2	5	0	
9/9/2008	a tassinari	dux	55602-2	10	25	3
9/16/2008	a tassinari	dux	55602-2	10		0
9/25/2008	a tassinari	dux	55602-2	0		
5/7/2009	a tassinari	dux	55602-2	10	5	2
5/27/2009	a tassinari	dux	55602-2	10	0	
4/15/2009	c hanna	wbw	56301-1	10	2	2
5/18/2009	c hanna	wbw	56301-1	10	0	
6/24/2009	c hanna	wbw	56301-1			
5/18/2009	c hanna	wbw	56301-2	10	4	2
6/24/2009	c hanna	wbw	56301-2			
5/20/2008	c hanna	ebw	56393-1	10	5	3
5/12/2009	c hanna	ebw	56393-1	10	7	2
6/16/2009	c hanna	ebw	56393-1	10	0	
5/12/2009	c hanna	ebw	56393-3	10	6	2
6/16/2009	c hanna	ebw	56393-3	10	0	
5/12/2009	c hanna	ebw	56393-4	10	2	2
6/16/2009	c hanna	ebw	56393-4	10	0	
5/12/2009	c hanna	ebw	56393-5	10	2	2
6/16/2009	c hanna	ebw	56393-5	10	0	
4/2/2008	r demoura	dux	56534-2	10	5	1

5/30/2008	a tassinari	dux	56534-2	10	0	
8/5/2008	a tassinari	dux	56534-2	0		
5/7/2009	a tassinari	dux	56534-2	5	10	2
5/18/2009	a tassinari	dux	56534-2	10	0	
5/12/2009	a tassinari	dux	57562-1	10	3	3
5/28/2009	a tassinari	dux	57562-1	10	0	
7/31/2008	a tassinari	dux	57574-3	10	10	2
8/19/2008	a tassinari	dux	57574-3	10	0	
5/5/2008	c hanna	bro	58292-1	10	3	2
6/4/2009	c hanna	bro	58292-1	10	0	
7/8/2009	c hanna	bro	58292-1	10	4	2
4/11/2008	c hanna	whi	58402-1	10	5	2
4/29/2008	c hanna	whi	58402-1	10	0	
4/11/2008	c hanna	whi	58402-2	10	7	2
4/29/2008	c hanna	whi	58402-2	10	0	
4/28/2009	c hanna	whi	58402-2	10	3	2
6/3/2009	c hanna	whi	58402-2	10	0	
6/15/2009	a tassinari	dux	58571-1	10	5	2
6/24/2009	a tassinari	dux	58571-1	10	0	
6/30/2009	a tassinari	dux	58571-1	5	5	2
7/6/2009	motyka	dux	58571-1	5	0	
7/31/2008	a tassinari	dux	58583-1	10	10	2
8/22/2008	a tassinari	dux	58583-1	10	0	
5/19/2008	c hanna	whi	59393-1	10	4	3
5/20/2008	c hanna	ebw	59393-1	10	0	
4/14/2008	c hanna	whi	59393-2	5	5	3
5/19/2008	c hanna	whi	59393-2	10	0	
6/3/2008	c hanna	whi	59403-3	10	4	2
7/1/2008	c hanna	whi	59403-3	7	0	
5/28/2008	a tassinari	dux	59562-1	10	5	3
6/16/2008	a tassinari	dux	59562-1	10	0	
4/14/2008	c hanna	whi	59574-4	10	3	3
4/29/2008	c hanna	whi	59574-4	10	0	
4/14/2008	c hanna	whi	59574-6	10	5	3
4/29/2008	c hanna	whi	59574-6	10	0	
5/28/2008	a tassinari	dux	59583-1	10	20	3
6/27/2008	a tassinari	dux	59583-1	10	0	
7/25/2008	a tassinari	dux	59583-1	10	4	2
8/4/2008	a tassinari	dux	59583-1	0		
5/5/2008	c hanna	bro	60284-1	12	4	3
6/4/2009	c hanna	bro	60284-1	10	0	
6/3/2009	c hanna	whi	60372-1	10	30	2
6/11/2009	c hanna	whi	60372-1	10	0	
7/31/2008	c hanna	whi	60402-3	5	5	2
8/14/2008	c hanna	whi	60402-3	10	0	
5/8/2009	a tassinari	dux	60544-1	10	3	3
5/15/2009	a tassinari	dux	60544-1	10	0	
7/25/2008	a tassinari	dux	60562-1	5	10	2
9/15/2008	a tassinari	dux	60562-1	5	5	2
9/25/2008	a tassinari	dux	60562-1	10	0	
5/8/2009	a tassinari	dux	60562-1	10	5	3
5/18/2009	t medieros	dux	60562-1	10	0	

8/5/2008	r demoura	mfd	60601-1	20	10	2
7/10/2009	motyka	mfd	60601-1	10	0	
4/29/2009	c hanna	whi	60632-1	10	3	2
5/13/2009	a tassinari	mfd	60632-1	10	0	
4/14/2008	c hanna	whi	61393-3	5	4	2
4/30/2008	c hanna	whi	61393-3	10	0	
5/22/2008	a tassinari	pem	61533-1	10	0	3
5/21/2009	a tassinari	pem	61533-1	10	0	
5/20/2008	r demoura	mfd	61622-1	10	8	3
6/27/2008	r demoura	mfd	61622-1	10	0	
5/4/2009	r goodwin	hvr	62481-1	10	3	2
5/13/2009	r goodwin	hvr	62481-1			
5/23/2008	r goodwin	hvr	62493-1	10	0	
6/11/2008	c hanna	abg	63382-1	10	3	2
7/22/2008	c hanna	abg	63382-1	0		
5/1/2009	c hanna	abg	63392-4	10	4	2
6/26/2009	c hanna	abg	63392-4	10	0	
4/18/2008	r goodwin	roc	63431-1	15	10	3
5/28/2008	r goodwin	roc	63431-1	10	0	
5/19/2008	c hanna	abg	64372-2	10	2	2
5/30/2008	c hanna	abg	64372-2	10	0	
5/1/2009	c hanna	abg	64372-2	10	8	2
6/2/2009	c hanna	abg	64372-2	10	0	
4/10/2008	c hanna	abg	64372-3	5	3	2
5/19/2008	c hanna	abg	64372-3	10	0	
5/1/2009	c hanna	abg	64384-1	10	10	2
6/26/2009	c hanna	abg	64384-1	10	0	
5/19/2008	c hanna	abg	65384-1	10	3	2
5/30/2008	c hanna	abg	65384-1	10	0	
5/30/2008	c hanna	abg	66383-3	10	2	3
6/10/2008	c hanna	abg	66383-3	10	0	

Pesticide	Gals	Count	Lbs	Method	Sample	Comments
8	1			pc		
6		3		ha		dry
6		3		ha		
6		6		ha		
6		6		ha		
6		22		ha		
6		10		ha	y	
6		2		ha		
6		5		ha		dry
6		2		ha		
6		7		ha		
6		7		ha		
6		6		ha		
6		6		ha		
6		5				
6		10		ha		
8	1-Jan			pc		
6		2		ha		
6		8		ha		
6		23		ha	y	house call
1		4		ha		
1		6		ha	y	
1		8		ha	y	

1		10	ha	y	
1		5	ha	y	
6		5	ha	y	
6		5	ha		
6		9	ha	y	
6		8	ha		
6		4	ha	y	
6		6	ha	Y	dry
6		4	ha	y	
6		7	ha		
6		4	ha	y	
1		5	ha	y	
1		6	ha	y	
1		4	ha	y	
1		3	ha	y	
1		6	ha	y	
6		9	ha	y	
6		5	ha		
8	1		pc		
6		16	ha	y	
6		14	ha		
6		3	ha		
6		6	ha		
6		5	ha		
6		8	ha		

6	6	ha	y
6	5	ha	y
1	13	ha	y
6	6	ha	
6	5	ha	
6	3	ha	
6	26	ha	
6	13	ha	
6	3	ha	y
6	4	ha	y
1	6	ha	y
6	12	ha	
6	4	ha	
6	10	ha	y
6	10	ha	y
6	7	ha	
6	11	ha	
6	8	ha	y
1	4	ha	y
6	4	ha	
6	4	ha	
6	5	ha	
6	5	ha	y
1	6	ha	y
1	2	ha	y
6	6	ha	y

dry

3		3	ha	y	
6		2	ha		
6		3	ha		
6		7	ha	y	
3		1	ha	y	
9	25		hs	y	need hs
6		10	ha		
6		6	ha		dry
1		9	ha	y	
6		12	ha		
6		1	ha		
6		3	ha		
6		14	ha		
6		12	ha		
6		2	ha		