

## Deer tick surveillance 2007

1	2	3	4	5	6	7	8	9	10
Town	Nymph ticks/h (% with LD)	Adult ticks/h	# ticks tested	# ticks with <i>Borrelia</i>	#ticks with <i>Babesia</i>	# ticks with <i>Anaplasma</i>	%LD infection	%>1 infection	% all three diseases
Sandwich (2)	36 (7%)	140	26	11	0	0	42%	0	0
Barnstable (1)	152 (10%)	132	16	8	0	5	50%	25%	0
Mashpee (1)	54 (12%)	68	12	5	1	1	42%	17%	0
Harwich (2)	89 (17%)	144	28	18	11	4	64%	43%	4%
Yarmouth (2)	45 (14%)	252	34	17	6	20	50%	18%	6%
MV (4)	95 (14%)	87	66	37	9	32	56%	30%	5%
Nantucket (2)	58 (0%)	58	12	3	1	0	25%	0	0
All CC	75 (12%)	147	116	59	18	30	51%	21%	3%
OVERALL	75 (11%)	124	194	99	28	65	51%	23%	4%

### Column breakdown:

- 1: towns and number of sites ( # )
- 2: nymph deer tick per hour and Lyme disease infection rate (%)
- 3: adult deer tick per hour
- 4: number of ticks tested via PCR
- 5: number with *Borrelia* (Lyme disease)
- 6: number with *Babesia microti*
- 7: number with *Anaplasma phagocytophilum*
- 8: percent with *Borrelia* (Lyme disease)
- 9: percent with >1 TBD (Tick-Borne Disease)
- 10: percent with all three TBD

**Deer tick nymph/adult population and infection**  
**31 December 2007**

Site	Area	Town	Nymphs/h (ld %)	Adults/h (Ld %)	#ticks tested	# <i>Borrelia</i> (B)	# <i>Babesia</i> (Bb)	# <i>Anaplasma</i> (A)	B/Bb	B/A	Bb/A	B/Bb/A
1	Shawme	Sandwich	48 (10%)	108 (64%)	11	7	0	0	0	0	0	0
2	Burgess	Sandwich	24 (4.3%)	172 (27%)	15	4	0	0	0	0	0	0
3	Bridge	Barnstable	152 (10%)	132 (50%)	16	8	0	5	0	4	0	0
4	Jehu Pond	Mashpee	54 (11.8%)	68 (42%)	12	5	1	1	1	1	0	0
5	Bells Neck	Harwich	24 (17.4%)	176 (72%)	18	13	10	4	9	3	0	1
6	Punk horn	Harwich	154(20.1%)	112 (50%)	10	5	1	0	0	0	0	0
7	Loring Foun	Nantucket	40 (0%)	36 (0%)	6	0	0	3	0	0	0	0
8	Almanack	Nantucket	75 (0%)	80 (50%)	6	3	1	0	0	0	0	0
9	Chappaquid	Edgartown	58 (33%)	160 (59%)	34	20	4	15	1	7	0	2
10	Sepiessa	W Tisbury	66 (25%)	44 (44%)	9	4	0	5	0	3	0	0
11	Cedar Tree	W Tisbury	150 (0%)	92 (82%)	11	9	2	5	2	4	0	0
12	Fulling Mill	Chilmark	105 (0%)	52 (33%)	12	4	3	7	1	1	1	1
13	Dennis Pnd	Yarmouth	23 (17.6%)	316 (53%)	19	10	4	10	0	1	1	1
14	Syrjala Con.	Yarmouth	66 (10.3%)	188 (47%)	15	7	2	10	0	3	1	1
Total				124 (51%)	194	99	28	65	14	27	3	8
Adult Infection						51.0%	14.4%	33.5%	7.2%	13.9%	1.5%	4.1%
Treatments			71 n/h	146 A/h	115	67	20	42	12	19	1	6
Infection of nymphs			18/163 (11.0%)			58.3%	17.4%	36.5%	10.4%	16.5%	0.9%	5.2%
Controls			78 n/h	102 A/h	79	32	8	23	2	8	2	2
Infection of nymphs			14/136 (10.7%)			40.5%	10.1%	29.1%	2.5%	10.1%	2.5%	2.5%

		<b>2007</b>		
		<b>Spring Nymphs/h</b>	<b>Spring Adults/h</b>	<b>Fall Adults/h</b>
<b>Loring Fndn</b>	<b>Rx-N</b>	<b>40</b>	<b>4</b>	<b>36</b>
<b>Chappaquiddick</b>	<b>Rx-MV1</b>	<b>58</b>	<b>16</b>	<b>160</b>
<b>Cedar Tree Neck</b>	<b>Rx-MV2</b>	<b>150</b>	<b>18</b>	<b>92</b>
<b>Shawme Crowell</b>	<b>Rx-CC1</b>	<b>48</b>	<b>3</b>	<b>108</b>
<b>Bridge Creek</b>	<b>Rx-CC2</b>	<b>152</b>	<b>8</b>	<b>132</b>
<b>Dennis Pond</b>	<b>Rx-CC3</b>	<b>23</b>	<b>58</b>	<b>316</b>
<b>Bell's Neck</b>	<b>Rx-CC4</b>	<b>24</b>	<b>2</b>	<b>176</b>
<b>AVERAGE</b>		<b>71</b>	<b>15.6</b>	<b>146</b>
<b>Almanac Pond</b>	<b>c-N</b>	<b>75</b>	<b>-</b>	<b>80</b>
<b>Sepiessa Point</b>	<b>c-MV1</b>	<b>66</b>	<b>-</b>	<b>44</b>
<b>Fulling Mill</b>	<b>c-MV2</b>	<b>105</b>	<b>36</b>	<b>52</b>
<b>Burgess</b>	<b>c-CC1</b>	<b>24</b>	<b>5</b>	<b>172</b>
<b>Jehu</b>	<b>c-CC2</b>	<b>54</b>	<b>-</b>	<b>68</b>
<b>Syrjala</b>	<b>c-CC3</b>	<b>66</b>	<b>14</b>	<b>188</b>
<b>Punkhorn</b>	<b>c-CC4</b>	<b>154</b>	<b>-</b>	<b>112</b>
<b>AVERAGE</b>		<b>78</b>	<b>18.3</b>	<b>102</b>

ADULT DEER TICKS PER TREATMENT SPRING COUNTS

Spring collections (2007)	I	II	III	IV	V	ave	AVE
Nantucket							
Station sites	-	4	-	-	-	-	
Control sites	-	-	-	-	-	-	
Martha's Vineyard							
Station sites							
CH	28	-	4	-		16	17
CT	16	-	20	-		18	
Control sites							
SP	-	-	0	-		0	18
FM	60	-	12	-		36	
Cape Cod							
Station sites							
SC	8	0	4	0		3	18
BCreek	24	4	4	0		8	
DP	144	72	8	8		58	
BN	8	0	0	0		2	
Control sites							
BurgessC	16	0	0	4		5	5
JP	--	-	-	0		0	
SC	28	16	8	4		14	
PH	--	--	-	0		0	