

## 2015 Gypsy Moth Trapping

## BACKGROUND

**The Gypsy Moth Program.** The gypsy moth program in North Carolina is under the jurisdiction of the NCDA&CS – Plant Industry Division and we thank them for providing these results. North Carolina is on the leading edge of the expanding gypsy moth front. To prevent further establishment of gypsy moth in our state, traps are set annually for male gypsy moths

using pheromone-baited traps (the bait mimics the pheromone produced by female gypsy moths). Through the Slow the Spread (STS) program, contractors trap the northern portion of North Carolina, while numerous cooperators trap the remainder of the state, including some overlap with STS counties. The trapping efforts provide information about gypsy moth populations and allows managers to determine and utilize the most efficient treatment methods available.

**Determining Treatments.** In addition to this year's trap counts, trap counts over the past several years and results from winter egg and pupal case surveys help to determine what treatment is most



A female gypsy moth and her egg mass, picture taken by Chris Elder (NCDA&CS – Plant Industry) in Buxton, NC.

appropriate for a suspected infestation. Combined, these data can reveal with more confidence whether a location is infested with a reproducing gypsy moth population or if the moths caught were likely blown in during a weather event, usually denoted by a few moths found in scattered traps.

## **RESULTS**

**2015 Trapping Results.** The 2015 trapping season produced more positive trap captures within more traps than in 2014 (see table & map of trap capture locations below). For a list of trap catches by county, reference the table at the end of this publication.

	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>		
Total moths captured	2,021	757	431	1457		
Number positive traps	915	348	247	419		
Total traps placed	12,939	13,631	10,380	11,565		
Number of treatments	TBD	3	3	5		
Total acreage of	TBD	21,250	2,495	3,854		
treatments						

Gypsy moth trap data from 2012-2015 trapping seasons.

**2015** Gypsy moth trap catches. *Map created by John Kidd, NCDA&CS – Plant Industry.* 



**Treatments.** These trap captures, along with egg mass surveys to be conducted this winter, will play a role in the determination of treatments that will be done in 2016. The proposed treatment areas for next year are shown on the map below and are subject to change. Public meetings will be held for each of the treatment areas.

Treated areas that were done this year (based on 2014 trap catches) included 1,804 acres in northwest Warren County, 174 acres in western Rockingham County, and 517 acres in northern Rockingham County. All three areas were treated with mating disruption (pheromone flakes that reduce the ability of the male moths to find a female moth).

**Proposed 2016 gypsy moth treatment locations and type.** BTK- a bacterial pesticide used in the control of larvae; MD – Mating disruption (pheromone flakes); NPV – Gypchek, a viral disease specific to the gypsy moth. *Map created by John Kidd, NCDA&CS – Plant Industry.* 



2015 Gypsy moth trap catches by county.

County	Traps	Positive Moths	County	Traps	Positive	Moths	
	Set	Traps	Caught	County	Set	Traps	Caught
Alamance	125	0	0	Cleveland	3	0	0
Alexander	30	0	0	Columbus	2	0	0
Alleghany	139	46	118	Craven	12	0	0
Ashe	166	2	2	Cumberland	49	1	1
Avery	58	0	0	Currituck	237	17	18
Beaufort	228	1	1	Dare	158	35	98
Bertie	305	3	3	Davidson	164	11	11
Bladen	248	0	0	Davie	57	3	3
Brunswick	228	2	10	Duplin	3	0	0
Buncombe	150	1	1	Durham	119	3	3
Burke	149	7	12	Edgecombe	149	3	3
Cabarrus	106	0	0	Forsyth	125	9	10
Caldwell	117	7	7	Franklin	214	57	79
Camden	158	6	8	Gates	230	28	56
Carteret	44	0	0	Graham	1	0	0
Caswell	529	60	340	Granville	354	62	152
Catawba	5	0	0	Greene	79	0	0
Chatham	205	0	0	Guilford	203	4	5
Cherokee	91	0	0	Halifax	451	6	6
Chowan	85	0	0	Harnett	172	2	2
Clay	1	0	0	Haywood	95	0	0

County	Traps Set	Positive Traps	Moths Caught	County	Traps Set	Positive Traps	Moths Caught
Henderson	90	1	1	Person	256	21	23
Hertford	229	8	9	Pitt	3	0	0
Hoke	109	0	0	Polk	1	0	0
Hyde	10	0	0	Randolph	206	4	6
Iredell	173	2	2	Richmond	1	0	0
Jackson	99	0	0	Robeson	5	0	0
Johnston	229	1	1	Rockingham	439	28	113
Jones	20	4	20	Rowan	154	5	6
Lee	74	1	1	Rutherford	1	0	0
Lenoir	107	0	0	Sampson	274	0	0
Lincoln	87	4	5	Scotland	4	0	0
Macon	8	0	0	Stanly	3	0	0
Madison	100	0	0	Stokes	260	36	39
Martin	123	0	0	Surry	280	103	157
McDowell	96	1	1	Swain	2	1	1
Mecklenburg	166	2	2	Transylvania	59	1	1
Mitchell	57	0	0	Tyrrell	66	0	0
Montgomery	128	0	0	Union	3	0	0
Nash	269	37	70	Vance	191	105	305
New Hanover	76	0	0	Wake	247	12	12
Northampton	360	1	1	Warren	388	98	205
Onslow	138	1	1	Washington	42	0	0
Orange	182	5	8	Watauga	97	2	2
Pamlico	1	0	0	Wayne	167	0	0
Pasquotank	154	1	1	Wilkes	229	26	27
Pender	69	11	33	Wilson	39	0	0
Perquimans	152	2	2	Yadkin	100	15	17
				Yancey	72	0	0
				Total	12939	915	2021

For updates on gypsy moth treatments, visit the Gypsy Moth Program website at <u>http://www.ncagr.gov/plantindustry/Plant/entomology/GM.htm</u>