

North Carolina Pest News

Departments of Entomology and Plant Pathology



Stephen J. Toth, Jr., editor

Volume 22, Number 21, August 31, 2007

CAUTION !

The information and recommendations in this newsletter are applicable to North Carolina and may not apply in other areas.

In This Week's Issue . . .

ANNOUNCEMENTS AND GENERAL INFORMATION

- Pest Management and Pesticide Information Available on the Internet

ORNAMENTALS AND TURF

- European Hornets
- San Jose Scales

INSECT TRAP DATA

- Light Trap Data from Anson, Stanly and Union Counties
- Light Trap Data from Bertie County
- Light Trap Data from Chowan County
- Light Trap Data from Craven County
- Light Trap Data from Cumberland County
- Light Trap Data from Duplin County
- Light Trap Data from Edgecombe County
- Light Trap Data from Halifax County

- Light Trap Data from Hoke County
- Light Trap Data from Jones County
- Light Trap Data from Lenoir County
- Light Trap Data from Martin County
- Light Trap Data from Nash County
- Light Trap Data from Northampton County
- Light Trap Data from Onslow County
- Light Trap Data from Robeson County
- Light Trap Data from Sampson County
- Light Trap Data from Scotland County
- Light Trap Data from Wayne County
- Light Trap Data from Wilson County

See current and archived issues of the *North Carolina Pest News* on the World Wide Web at:
http://ipm.ncsu.edu/current_ipm/pest_news.html

ANNOUNCEMENTS AND GENERAL INFORMATION

Pest Management and Pesticide Information Available on the Internet

Several North Carolina State University web sites containing pest management and pesticide information are available for county Extension agents, growers, pesticide applicators, agricultural consultants, pest control operators, landscapers, homeowners and other interested persons. The first site is the College of Agriculture and Life Sciences' *Pesticide Programs and Educational Resources* web page at: <http://ipm.ncsu.edu/pesticides>. This site is a portal to a variety of programs in the College that address pesticide-related topics ranging from agromedicine to wildlife protection. Also, links are provided to newsletters, fact sheets, manuals, and other pesticide information sources available from the various academic departments in the College of Agriculture and Life Sciences.

The second site is the *North Carolina Pest Management Information Program* web page at: <http://ipm.ncsu.edu/ncpmip>. This program serves as an information resource on current agricultural and non-agricultural pest management practices, problems and issues in North Carolina and offers timely, science-based pest management and pesticide information to readers. The site provides access to pest management profiles (i.e., crop profiles) for agricultural crops and non-agricultural sites in North Carolina.

The third site is the *North Carolina Pesticide Safety Education Program* web page at: <http://ipm.ncsu.edu/pesticidesafety>. This program promotes the responsible use of pesticides in North Carolina through educational resources and training. Information on pesticide certification, licensing, training, disposal, container recycling, record keeping, etc. is available on the site.

The fourth site is the *Southern Region Integrated Pest Management (IPM) Center* web page at: <http://www.sripmc.org>. The Southern Region IPM Center, funded by the U. S. Department of Agriculture and managed at North Carolina State University, supports numerous IPM research, educational and regulatory activities and the communication of IPM within the Southern U. S. The site provides considerable information on IPM in a variety of settings, both agricultural and non-agricultural.

Bookmark these web sites on your computer for timely, up-to-date information on pest management and pesticides in North Carolina and the Southern U. S.

ORNAMENTALS AND TURF

From: Stephen B. Bambara, Extension Entomologist

European Hornets

I talk about European hornets (Fig. 1) almost every year at this time, but it is hard to be bored by this insect. European hornet populations are peaking. Adults frequently visit fluxing oak trees and they seem to enjoy butting their heads against lighted windows at night. The European hornet, *Vespa crabro*, is an introduced species and the only true hornet in North America. It builds large tan paper nests typically located in hollow trees and often partially exposed. Sometimes they nest in man-made structures. Like all hornets and wasps, they can be considered beneficial because they eat other insects including other stinging insects. However, an unfortunate nest location could place a person at higher risk of being stung. They may sometimes strip bark from soft barked twigs. A normal foraging hornet, if left to tend to its own business, is usually not a threat. For more information about these mahogany and yellow colored hornets and how to control them if necessary, see *Residential, Structural and Community Pests Insect Note No. 11* on the web at <http://www.ces.ncsu.edu/depts/ent/notes/Urban/eurohornet.htm>.



Fig. 1. European hornet visiting a break in maple tree bark. Image courtesy of Rich Sabulsky, Zionsville, Pennsylvania

San Jose Scales

The San Jose scale is one of the armored scales that has given fruit growers problems over the years. I have recently received a report of this pest on ornamental cherry. All stages were present, so it was alive and active. This late in the season, parasitoids may be working on the scale, so horticultural oil would be a good choice for treatment. As the scale feeds, it injects its saliva into the tree, which results in decline and possible death of the host plant. It can attack the bark, foliage and fruit. There are five generations of this insect per year. *Ornamentals and Turf Insect Information Note No. 87*, Pest Control Calendar for Ornamental Cherries and Plums, may be of assistance (see <http://www.ces.ncsu.edu/depts/ent/notes/O&T/calendars/note087.html>).

INSECT TRAP DATA

From: Thomas G. Pegram, Agricultural Extension Agent, Union County

Light Trap Data from Anson, Stanly and Union Counties

```

*****
                          Number of Adult Insects
*****
      Anson S      Anson N      Union S      Union N      Stanly
*****
Date      CBW  GR  BR  CBW  GR  BR  CBW  GR  BR  CBW  GR  BR  CBW  GR  BR
*****
July 9      -   -   -    0   0   0    6  36   0    7   4   2   10  0   0
July 11     -   -   -    0   0   0    6  40   0    4   4   0    3   0   0
July 13     -   -   -   10   0   0    7  41   0   10   3   2    4   0   0
July 16     9  53   0   15   -   -    7  19   -    4   7   0   10   0   0
July 18     9  55   0    -   -   -    9  27   -    8   5   1    6   1   0
July 20    12  64   2   19   -   -   26  39   -    7   9   0    6   0   0

```

July 23	13	58	0	20	-	-	power outage	11	2	0	12	1	0		
July 25	12	2	0	22	-	-	37	7	0	7	0	13	1	0	
July 27	31	4	0	85	-	-	28	3	0	10	1	0	17	0	0
July 30	72	18	1	75	1	-	56	21	-	7	3	1	13	0	0
August 1	29	5	0	67	1	-	32	16	-	19	4	0	18	2	0
August 3	55	23	0	51	1	-	104	18	-	12	1	0	19	1	0
August 6	139	22	1	78	0	0	245	51	0	38	6	1	38	1	0
August 8	142	21	0	60	0	0	270	78	0	52	5	0	30	3	0
August 10	175	21	0	58	3	0	294	67	0	117	14	0	16	0	0
August 13	-	-	-	63	0	0	251	54	0	40	12	0	45	1	0
August 15	-	-	-	light out			143	12	0	54	7	0	13	0	0
August 17	-	-	-	46	0	0	135	25	0	31	2	0	16	1	0
August 20	126	14	0	-	-	-	147	21	0	62	34	0	32	3	0
August 22	57	21	0	-	-	-	125	15	0	27	4	0	14	0	0
August 24	78	21	0	-	-	-	83	12	0	11	3	0	10	2	0

 CBW = cotton bollworm moths; GR = green stink bugs; BR = brown stink bugs

From: Richard W. Rhodes, County Extension Director, Bertie County

Light Trap Data from Bertie County

Date	Windsor			Woodard			Hexlena			Roxobel			Colerain		
	BW	GSB	BSB	BW	GSB	BSB	BW	GSB	BSB	BW	GSB	BSB	BW	GSB	BSB
July 19	0	0	0	7	3	0	0	0	0	16	5	0	-	-	-
July 20	5	16	0	24	3	0	0	4	0	-	-	-	-	-	-
July 21	0	0	0	-	-	-	0	0	0	10	3	0	-	-	-
July 22	3	0	0	-	-	-	0	0	0	-	-	-	-	-	-
July 23	0	0	0	14	2	0	0	0	0	16	0	0	0	0	0
July 24	3	4	0	7	0	0	6	0	0	13	1	0	29	0	0
July 25	4	1	0	16	1	0	-	-	-	16	1	0	47	0	0
July 26	5	0	0	26	1	0	3	0	0	12	0	0	30	0	0
July 27	3	0	0	27	1	0	6	0	0	22	2	0	69	0	0
July 28	3	0	0	-	-	-	-	-	-	-	-	-	-	-	-
July 29	9	1	0	-	-	-	-	-	-	-	-	-	-	-	-
July 30	7	1	0	41	1	0	11	0	0	23	0	0	115	1	0
July 31	4	0	0	10	0	0	14	0	0	14	0	0	40	0	0
August 1	11	0	0	11	1	0	15	0	0	9	0	0	57	0	0
August 2	14	0	0	11	0	0	19	0	0	14	0	0	54	0	0
August 3	26	0	0	15	0	0	26	0	0	5	0	0	62	4	0
August 4	32	2	0	-	-	-	-	-	-	-	-	-	-	-	-
August 5	118	3	0	-	-	-	-	-	-	-	-	-	-	-	-
August 6	48	0	0	82	7	0	168	0	0	24	2	0	258	41	0
August 7	111	3	0	-	-	-	23	0	0	12	3	0	119	9	0
August 8	128	11	0	136	5	0	164	0	0	11	1	0	88	13	0
August 9	88	10	0	43	5	0	82	22	0	24	4	0	82	3	0
August 10	-	-	-	39	4	0	44	0	0	13	3	0	-	-	-
August 11	-	-	-	18	0	0	-	-	-	32	0	0	-	-	-
August 12	60	3	0	-	-	-	-	-	-	-	-	-	-	-	-
August 13	11	0	0	42	0	0	28	0	0	8	1	0	-	-	-
August 14	18	0	0	28	0	0	9	0	0	28	0	0	-	-	-
August 15	22	0	0	25	1	0	7	0	0	14	2	0	11	4	0
August 16	48	3	0	41	3	0	4	0	0	8	1	0	17	4	0
August 17	35	3	0	-	-	-	-	-	-	48	0	0	-	-	-

August 18	-	-	-	18	0	0	-	-	-	-	-	-	-	-	-
August 19	55	3	0	14	0	0	-	-	-	36	0	0	-	-	-
August 20	14	2	0	18	0	0	-	-	-	27	0	0	84	1	0
August 21	-	-	-	8	0	0	-	-	-	27	1	0	11	1	0
August 22	-	-	-	26	3	0	-	-	-	30	0	0	-	-	-
August 23	52	2	0	34	2	0	-	-	-	40	3	0	-	-	-
August 24	-	-	-	21	3	0	-	-	-	27	1	0	-	-	-
August 25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August 27	50	1	0	98	5	0	-	-	-	146	0	0	-	-	-
August 28	-	-	-	54	0	0	-	-	-	16	0	0	-	-	-
August 29	8	0	0	47	0	0	-	-	-	-	-	-	-	-	-
August 30	5	0	0	20	0	0	-	-	-	-	-	-	-	-	-

BW = Bollworm moths; GSB = Green stink bugs; BSB = Brown stink bugs

From: Mike Williams, County Extension Director, Chowan County

Light Trap Data from Chowan County

Adult Insects

Date	CEW	GSB
July 25	11	-
July 26	35	-
July 27	25	-
July 28	19	1
July 29	-	-
July 30	30	2
July 31	18	0
August 1	28	0
August 2	30	1
August 3	48	4
August 4	38	1
August 5	68	2
August 6	36	12
August 7	136	4
August 8	163	4
August 9	223	10
August 10	210	8
August 11	-	-
August 12	110	0
August 13	lost	-
August 14	60	3
August 15	24	0
August 16	37	14
August 17	53	7
August 18	60	12
August 19	62	14
August 20	31	11
August 21	40	22
August 22	33	5
August 23	36	4
August 24	37	3
August 25	62	5

August 26 110 6
 August 27 - -
 August 28 65 3

CEW = Corn earworms (bollworms);
 GSB = Green stink bugs

From: Mike Carroll, Agricultural Extension Agent, Craven County

Light Trap Data from Craven County

 Number of Adult Insects

Date	THW	TBW	CEW	GSB	BSB	ECB	FAW	BAW	Looper
July 6	3	1	11	1	1	-	2	-	-
July 9	5	1	26	2	1	-	1	-	-
July 11	2	-	22	1	1	-	-	-	-
July 13	4	-	28	2	-	-	1	-	-
July 16	4	2	34	2	1	-	3	-	-
July 18	3	-	10	1	-	-	-	-	-
July 19	5	1	23	3	2	-	1	-	-
July 23	7	2	31	2	1	-	2	-	-
July 25	1	-	29	-	-	2	1	-	-
July 27	1	-	33	1	-	-	2	-	-
July 30	-	-	-	-	-	-	-	-	-
August 1	1	-	73	1	-	-	4	-	-
August 3	-	2	141	1	-	3	5	-	-
August 6	5	-	342	8	-	-	6	-	-
August 8	3	-	451	3	-	-	10	-	-
August 10	4	-	375	8	-	-	-	-	-
August 13	8	-	176	6	-	-	1	-	-
August 15	4	-	71	5	-	-	2	-	-
August 17	3	-	56	5	-	-	1	-	-
August 20	3	-	112	8	-	-	2	-	-
August 22	3	-	51	-	-	-	2	-	-
August 24	2	-	72	1	-	-	1	-	-

THW = tobacco hornworms; TBW = tobacco budworms; CEW = corn earworms;
 GSB = green stink bugs; BSB = brown stink bugs; ECB = European corn
 borers; FAW = fall armyworms; BAW = beet armyworms

Location of trap: Cove City
 Cooperators: R&W McCoy Farms and Cove City Fertilizer

From: Colby S. Lambert, Agricultural Extension Agent, Cumberland County

Light Trap Data from Cumberland County

```
*****
                        Number of Adult Insects
                        *****
Date      THW      CEW      GSB      BSB
*****
July 11   0         3         5         0
July 13   0         2         5         0
July 16   4         33        12        0
July 18   2         66         6         0
July 20   7         160        20        0
July 23  23         214         0         0
July 25  14         150         6         0
July 27  12         202        13         0
July 30   6         197        12         0
August 1  -          -          -          -
August 3  -          -          -          -
August 6  -          -          -          -
August 8   9         442        19         0
August 10  5         271        18         0
August 13 15         283        10         0
August 15  3         463        22         0
August 17  1         207         7         0
August 20  9         311        19         0
August 22  1         193        16         0
August 24  8         251        38         0
August 27 10         91         31         0
August 29  6         49         35         1
August 31  8         71         16         0
*****
```

THW = tobacco hornworms; CEW = corn earworms;
GSB = green stinks bugs; BSB = brown stink bugs

Trap located in Godwin at Cumberland/Harnett County Line
at Lewis Farms off of Highway 301

From: Curtis D. Fountain, Agricultural Extension Agent, Duplin County

Light Trap Data from Duplin County

```
*****
                        Number of Adult Insects
                        *****
Date      BW      GSB      BSB
*****
July 2    0         1         0
July 4    0         0         0
July 6    0         4         4
July 9    4         8         0
July 11   1         11        0
July 13   4         7         2
July 16   3         6         0
July 18   9         13        0
*****
```

July 20	21	23	0
July 23	22	3	0
July 25	15	0	0
July 27	53	4	0
July 30	73	1	0
August 1	98	2	0
August 3	71	3	0
August 6	293	12	0
August 8	84	24	0
August 10	28	11	0
August 13	33	2	0
August 15	44	9	1
August 17	37	4	0
August 20	34	6	0
August 22	22	3	0
August 24	25	3	1
August 27	19	3	0
August 29	24	2	0
August 31	16	4	1

BW = cotton bollworms; GSB = green
stink bugs; BSB = brown stink bugs

Trap location: approximately two miles east of Albertson
Cooperator: Justin Murphy

From: Arthur R. Bradley, Jr., Agricultural Extension Agent, Edgecombe County

Light Trap Data from Edgecombe County

Number of Adult Insects

Date	W Edgecombe /a			Coakley /b			Lawrence /c		
	CEW	BS	GS	CEW	BS	GS	CEW	BS	GS
July 10	-	-	3	14	0	46	-	-	-
July 11	-	-	6	4	0	28	-	-	-
July 13	0	0	7	8	0	44	-	-	-
July 15	0	0	5	10	0	49	-	-	-
July 18	0	0	8	2	0	39	-	-	-
July 20	8	0	1	1	0	56	4	0	4
July 23	8	0	0	8	0	3	1	0	0
July 25	17	0	2	-	-	-	7	0	0
July 27	24	0	3	14	0	5	10	0	3
July 30	29	0	8	28	0	5	2	0	2
August 1	12	0	2	11	0	2	16	0	1
August 3	36	0	15	33	0	2	8	0	1
August 6	40	0	10	235	0	30	133	0	11
August 8	35	0	7	318	0	58	117	0	9
August 10	35	0	7	280	0	65	50	0	8
August 13	7	0	6	133	0	12	5	0	0
August 15	10	0	14	82	0	17	2	0	1
August 17	11	0	7	195	0	42	25	0	5
August 20	10	0	12	183	0	97	20	0	4
August 22	10	0	4	124	0	102	15	0	13

August 24 11 0 2 62 0 41 - - -

Abbreviations: CEW = corn earworms;
 BS = brown stink bugs; GS = green stinks bugs

a = trap located 12 miles west of Tarboro; maintained by Tom Porter.
 b = trap located 5 miles east of Tarboro; maintained by Glenn O'Neal.
 c = trap located at Lawrence; maintained by Terri Thomas.

From: Arthur Whitehead, Jr., Agricultural Extension Agent, Halifax County

Light Trap Data from Halifax County

Date	Hobgood			Scotland Neck			East Enfield			West Enfield		
	CEW	GSB	BSB	CEW	GSB	BSB	CEW	GSB	BSB	CEW	GSB	BSB
July 18	2	0	0	-	-	-	-	-	-	6	2	0
July 20	4	4	0	-	-	-	-	-	-	21	10	1
July 23	2	0	0	2	0	0	-	-	-	29	3	3
July 25	7	0	0	4	0	0	12	1	0	13	1	0
July 27	10	3	0	3	0	0	10	1	0	6	2	0
July 30	2	2	0	2	0	0	15	0	0	19	2	0
August 1	16	1	0	1	0	0	10	0	0	26	0	2
August 3	8	1	0	4	0	0	-	-	-	11	2	0
August 6	133	11	0	37	2	0	45	8	0	14	1	1
August 8	113	9	0	141	5	1	75	1	0	5	1	1
August 10	50	8	0	-	-	-	35	0	0	4	0	2

Date	Glenview			Weldon			Roseneath		
	CEW	GSB	BSB	CEW	GSB	BSB	CEW	GSB	BSB
July 18	-	-	-	-	-	-	-	-	-
July 20	-	-	-	-	-	-	-	-	-
July 23	14	3	0	-	-	-	-	-	-
July 25	1	0	0	18	0	0	1	1	0
July 27	25	0	0	30	1	0	2	0	0
July 30	23	0	0	35	1	0	5	1	0
August 1	16	0	0	26	1	0	5	0	0
August 3	46	0	0	20	0	0	9	0	0
August 6	108	11	0	76	6	0	66	4	0
August 8	82	22	1	60	5	0	86	5	0
August 10	-	-	-	-	-	-	78	12	0

Abbreviations: CEW = corn earworms;
 GSB = green stinks bugs; BSB = brown stink bugs

From: Keith B. Walters, County Extension Director, Hoke County

Light Trap Data from Hoke County

```
*****  
Date           Moths           GSB           BSB  
*****  
July 16         25             2             0  
July 18         18             5             0  
July 20         49            10            0  
July 23         60             5             0  
July 25         80             2             1  
July 27         95             3             0  
July 30        180            6             0  
*****
```

GSB = green stink bugs; BSB = brown stink bugs

Location of trap is Chisholm Road, Raeford.
Trap monitored by Earl Hendrix.

From: Franky J. Howard, Agricultural Extension Agent, Jones County

Light Trap Data from Jones County

```
*****  
                        Number of Adult Insects  
*****  
Date           BW           BSB           GSB           HW  
*****  
July 2          0            0            0            0  
July 4          0            0            0            0  
July 6          1            0            0            1  
July 9          7            0            0            0  
July 11         0            0            0            1  
July 13         0            0            0            0  
July 16         0            1            1            15  
July 18         0            4            0            18  
July 20         0            0            1            7  
July 23         1            0            0            4  
July 25         5            0            1            10  
July 27        23            0            0            2  
July 30        27            0            0            0  
August 1        49            0            1            2  
August 3        34            0            0            5  
August 6        41            0            3            11  
August 8        12            0            0            0  
August 10       48            0            3            10  
August 13       23            0            0            18  
August 15        1            0            0            4  
August 17        4            0            0            14  
*****
```

Trap Location: Comfort
Monitored by: Morris and Brett Pike

BW = bollworms; BSB = brown stink bugs;
GSB = green stink bugs; HW = hornworms

From: Alan A. Harper, Lenoir County

Light Trap Data from Lenoir County

June

```
*****
                        Number of Adult Insects
*****
Date      HW      CEW      ECB      AW      AWC      GSB      BSB      TBW
*****
June 15   0        5        0        5        2        0        0        0
June 16   0        7        0        1        3        0        0        0
June 17   0        0        0        2        2        2        0        1
June 18   0        1        1        1        4        0        0        0
June 19   0        3        0        0        2        2        4        0
June 20   0        5        1        0        3        0        2        0
June 21   -----no electric power-----
June 22   0        2        0        0        1        0        0        0
June 23   1       10        1        3       14        1        0        1
June 24   0        3        0        1        4        0        0        0
June 25   0        1        1        1        2        1        0        0
June 26   0        0        5        0        6        3        0        0
June 27   0        3        4        1        2        2        0        0
June 28   0        4        1        0        3        1        0        0
June 29   0        4        0        1        2        0        0        0
June 30   0        4        2        1        5        0        0        0
*****
```

July

```
*****
                        Number of Adult Insects
*****
Date      HW      CEW      ECB      AW      AWC      GSB      BSB      TBW
*****
July 1    -----no electric power-----
July 2    0        3        0        0        3        2        0        0
July 3    0        6        2        0        6        1        0        0
July 4    0        1        0        0        3        0        0        0
July 5    0        2        1        0        5        4        0        0
July 6    0        3        1        0        2        1        0        0
July 7    0        3        1        1        3        4        0        0
July 8    -----no electric power-----
July 9    0        2        2        0        5        3        0        0
July 10   0        2        0        0        0        7        0        0
July 11   0        1        0        0        3        3        0        0
July 12   0        0        0        0        1        1        0        0
July 13   0        2        2        0        5        9        0        0
July 14   0        4        2        0        3        1        0        0
July 15   0        0        3        4        1        4        0        0
July 16   1        2        1        1        4        9        0        0
July 17   0        3        2        1        2        3        0        0
July 18   0        2        0        0        1        1        0        0
July 19   1       12        1        0        3       15        0        0
July 20   0       11        2        0        7        7        2        0
July 21   -----unplugged-----
July 22   0       12        2        0        7        0        0        0
July 23   0        8        4        0        4        1        0        1
*****
```

July 24	1	13	0	1	2	0	0	0
July 25	0	22	1	1	2	3	0	0
July 26	0	21	3	1	4	1	0	0
July 27	0	19	1	0	3	3	0	0
July 28	0	27	6	1	3	2	0	2
July 29	0	28	4	1	4	2	0	0
July 30	0	41	0	1	3	2	0	0
July 31	1	31	3	0	3	3	0	0

August

Number of Adult Insects

Date	HW	CEW	ECB	AW	AWC	GSB	BSB	TBW
August 1	2	37	2	0	8	5	1	0
August 2	0	85	3	0	2	11	0	0
August 3	0	76	4	0	3	6	0	0
August 4	0	84	2	0	1	18	0	0
August 5	0	76	4	1	4	14	0	0
August 6	0	99	1	0	2	16	0	0
August 7	0	55	5	0	0	25	0	0
August 8	1	65	1	0	1	32	0	0
August 9	1	60	3	0	4	13	1	0
August 10	1	30	2	0	0	23	0	1
August 11	1	20	0	2	2	4	0	1
August 12	0	48	2	1	3	9	0	0
August 13	0	41	2	1	2	1	0	0
August 14	1	23	2	1	1	3	0	0
August 15	2	70	2	6	1	7	0	1
August 16	1	14	2	0	0	2	0	0
August 17	1	11	2	0	0	1	0	0
August 18	2	10	1	1	1	2	0	0
August 19	2	30	1	7	0	2	0	0
August 20	0	17	2	2	0	0	0	0
August 21	0	7	4	5	2	1	0	0
August 22	0	17	2	0	1	0	0	0
August 23	1	39	10	2	1	3	0	0
August 24	1	34	20	0	1	1	0	0
August 25	0	18	8	0	0	0	0	0
August 26	0	21	7	0	2	1	0	0
August 27	0	8	10	1	3	0	0	0
August 28	0	18	5	2	0	2	0	0
August 29	0	15	4	0	2	1	0	0
August 30	0	15	7	0	1	0	0	0

Abbreviations: HW = hornworms; CEW = corn earworms; ECB = European corn borers; AW = true armyworms; AWC = armyworm complex; GSB = green stink bugs; BSB = brown stink bugs; TBW = tobacco budworms

From: J. B. Coltrain, County Extension Director, Martin County

Light Trap Data from Martin County

```
*****
                        Farm Life      Robersonville
*****
Date          BW   GSB                BW   SB
*****
July 16       7    3                0    8
July 18       4    5                0    5
July 20       1    3                0    7
July 23       7    0                7    0
July 25      11    0                6    1
July 27       9    0                10   0
July 30      17    2                16   2
August 1     16    0                10   1
August 3     22    1                27   1
August 6     32    8                175  4
August 8     39   11                270  7
August 10    57    3                105  4
August 13    39    1                 42   5
August 15    39    3                 39   2
August 17    47    2                 95   5
August 20    52    9                147  16
August 22    39    3                 69   7
August 24    61    2                 28   1
August 27    36    0                 45   0
August 29    49    4                 27   0
August 31    63    1                 33   0
*****
```

BW = Bollworm moths; GSB = Green stink bugs; SB = Stink bugs

From: Charlie Tyson, Agricultural Extension Agent, Nash County

Light Trap Data from Nash County

```
*****
                        Number of Adult Insects
*****
Date          CEW          GSB          BSB
*****
July 13       3             -             -
July 16      10             -             -
July 18       5             3             -
July 20       8            10            1
July 23      14             3             0
July 25       1             0             0
July 27      25             0             0
July 30      23             0             0
August 1     16             0             0
August 3     46             0             0
August 6    108             0             0
August 8     82            22            1
August 10    72            17            0
August 13   118             2             0
```

August 15 41 1 0
 August 17 176 4 0
 August 20 161 4 0
 August 22 134 4 0

CEW = corn earworms; GSB = green
 stink bugs; BSB = brown stink bugs

Trap location: near Hickory Crossroads

From: Craig Ellison, Agricultural Extension Agent, Northampton County

Light Trap Data from Northampton County

 Number of Adult Insects

Date	Woodland			Conway			'Neck			Seaboard			Gaston			Jackson		
	CEW	GR	BR	CEW	GR	BR	CEW	GR	BR	CEW	GR	BR	CEW	GR	BR	CEW	GR	BR
July 18	-	-	-	-	-	-	-	-	-	3	4	-	-	-	-	0	12	0
July 20	-	-	-	-	-	-	-	-	-	2	2	0	-	-	-	12	89	2
July 23	-	-	-	4	2	0	-	-	-	6	0	0	-	-	-	25	2	0
July 25	0	0	0	-	-	-	-	-	-	12	4	0	-	-	-	26	5	0
July 27	0	0	0	5	1	0	-	-	-	16	2	0	1	0	0	37	3	0
July 30	3	1	0	-	-	-	-	-	-	14	2	0	3	0	0	79	7	0
Aug. 1	3	0	0	4	1	0	-	-	-	12	4	0	7	0	0	59	9	0
Aug. 3	5	0	0	13	3	0	-	-	-	18	9	0	5	0	0	119	7	0
Aug. 6	10	1	0	12	4	0	-	-	-	65	21	0	12	0	0	358	19	0
Aug. 8	12	7	0	24	8	2	-	-	-	115	32	0	19	0	0	331	38	0
Aug. 10	14	9	1	16	4	0	-	-	-	37	6	0	-	-	-	249	60	0
Aug. 13	3	1	0	15	4	2	-	-	-	16	2	0	24	1	0	184	27	0
Aug. 15	-	-	-	38	5	1	-	-	-	-	-	-	-	-	-	104	5	0
Aug. 17	-	-	-	18	2	0	-	-	-	24	3	0	14	2	0	204	5	0
Aug. 20	8	2	0	9	0	0	-	-	-	114	5	0	1	2	0	351	21	0
Aug. 22	10	3	0	12	6	0	-	-	-	56	4	0	-	-	-	174	11	0
Aug. 24	10	3	0	15	6	0	-	-	-	29	2	0	-	-	-	297	8	0

CEW = corn earworms; GR = green stink bugs; BR = brown stink bugs

Locations: Woodland, Conway, 'Neck, Seaboard, Gaston and Jackson
 Monitored by: L. Culpepper, K. Edwards, B. Johnson, T. Flythe,
 D. Grant and B. Bryant

From: Tray Bridgers, Agricultural Extension Agent, Onslow County

Light Trap Data from Onslow County

```
*****
                        Number of Adult Insects
                        *****
Date      Bollworms   GSB    BSB   Hornworms
*****
July  4           6         3     0         0
July  6          20         7     0         0
July  9          25        19     3         0
July 11          21        10     0         0
July 13          33        10     3         1
July 16          31        10     0         0
July 18          34         3     5         3
July 20          39        18     2         6
July 23          25         5     0         3
July 25          25         0     0         0
July 27          57         4     0         2
July 30         105         7     0         0
August 1          70         3     0         3
August 3         185         3     0         0
August 6         190        40     0         0
August 8         288        88     0         3
August 10        200       100     0         4
August 13        110        20     0         0
August 15         85        15     0         0
August 17         64        49     0         5
August 20         65        25     0         0
August 22         42        41     0         4
August 24         55        15     0         0
*****
```

GSB = green stinks bugs; BSB = brown stink bugs

Trap location: Richlands; Cooperator: Richland Farms
Insect counts are from a single black light trap
located approximately 1 mile east of Richlands.

From: Kent Wooten, Agricultural Extension Agent, Robeson County

Light Trap Data from Robeson County

```
*****
                        Number of Adult Insects
                        *****
Date      BW     GSB    BSB    FAW
*****
July  6          12     -     -     -
July  7-8         23     -     -     -
July  9          18     -     -     -
July 10          15     -     -     -
July 11          11     -     -     -
July 12          14     -     -     -
July 13-15        47     18     3     -
*****
```

July 16	18	7	1	2
July 17-18	132	17	4	-
July 19	98	11	1	11
July 20	105	7	1	9
July 21-22	172	5	0	13
July 23	105	2	0	2
July 24	102	3	0	0
July 25	97	5	1	3
July 26	93	4	0	4
July 27-29	165	6	0	3
July 30	58	3	0	4
July 31-1	191	35	1	4
August 2	69	2	1	1
August 3-5	168	18	1	3
August 6	63	7	0	0
August 7	52	6	0	2
August 8	48	6	0	0
August 9	53	5	1	0
August 10-12	131	17	1	2
August 13	56	6	0	2
August 14	43	7	1	1

BW = bollworms; GSB = green stick bugs;
 BSB = brown stink bugs; FAW = fall armyworms

Location is Rowland; monitored by Kay McGirt

From: Josh Gaddy, Agricultural Extension Agent, Sampson County

Light Trap Data from Sampson County

Number of Adult Insects				
Date	BW	GSB	BSB	THW

July 2	----- trap set up -----			
July 5	3	0	1	1
July 6	3	0	0	0
July 9	3	7	0	4
July 11	3	1	1	2
July 13	4	4	0	8
July 16	----- power failure -----			
July 18	12	0	0	12
July 20	57	5	0	8
July 23	132	2	0	17
July 25	50	0	0	4
July 27	93	1	0	3
July 30	118	5	0	3
August 1	124	1	1	2
August 3	130	5	0	1
August 7	178	4	0	9
August 10	215	5	0	20
August 13	57	1	0	45
August 15	72	3	1	38
August 17	30	0	0	10
August 20	52	0	0	29

August 22 14 1 0 10
 August 24 45 4 1 13
 August 27 50 5 3 10
 August 29 21 0 0 1
 August 31 36 0 0 4

BW = cotton bollworms; GSB = green stink bugs;
 BSB = brown stink bugs; THW = tobacco hornworms

Black trap located 6 miles south of Clinton on
 US-701S on the farm of Mike and James Hope.

From: David E. Morrison, Agricultural Extension Agent, Scotland County

Light Trap Data from Scotland County

 Number of Adult Insects

Date	Gibson				John's				Laurinburg			
	BW	GSB	BSB	FAW	BW	GSB	BSB	FAW	BW	GSB	BSB	FAW
July 11	13	14	0	0	22	33	1	0	12	10	1	0
July 13	8	10	0	0	17	25	6	0	3	7	0	0
July 16	16	14	0	0	61	14	0	0	26	5	0	0
July 18	16	5	0	0	74	24	2	0	57	6	0	0
July 20	41	7	0	0	223	41	0	0	156	11	0	0
July 23	26	1	0	0	268	3	0	0	81	1	0	0
July 25	62	3	0	0	138	1	0	0	146	6	0	1
July 27	53	4	0	0	164	4	0	0	110	5	0	0
July 30	133	9	0	0	377	5	0	0	175	5	0	1
Aug. 1	27	2	0	0	274	0	0	0	96	3	0	0
Aug. 3	142	23	0	0	308	1	0	0	323	9	0	0
Aug. 6	195	25	0	0	240	13	0	0	266	44	0	0
Aug. 8	123	19	0	0	132	17	1	0	44	9	1	2
Aug. 10	80	14	0	0	94	27	1	0	40	6	0	2
Aug. 13	43	11	0	0	80	7	1	0	38	2	0	1
Aug. 15	70	4	0	0	64	0	1	0	32	0	0	2
Aug. 17	148	10	0	0	-	-	-	-	9	3	0	0
Aug. 20	160	23	1	0	212	9	0	0	23	0	0	1
Aug. 22	67	14	0	0	270	7	0	0	9	0	0	2
Aug. 24	47	6	0	0	195	1	1	12	12	2	0	2
Aug. 27	157	6	0	0	-	-	-	-	24	0	1	4
Aug. 29	142	2	1	0	142	3	6	0	12	2	1	3

BW = bollworm moth; GSB = green stink bugs;
 BSB = brown stink bugs; FAW = fall armyworms

From: Kevin Johnson, Agricultural Extension Agent, Wayne County

Light Trap Data from Wayne County

```

*****
                        Number of Adult Insects
*****
                Seven Springs                Goldsboro
*****                *****
Date           GSB   BSB   CEW   HW           GSB   BSB   CEW   HW
*****
July 6         -     -     -     -           2     0     1     0
July 9         -     -     -     -          23     6     1     0
July 11        -     -     -     -           1     0     1     0
July 13        1     0     1     2           5     0     3     1
July 16        2     0     6     4           -     -     -     -
July 18        0     0     5     0          10     -    11     2
July 20        4     0     4     3           -     -     -     -
July 23        1     0     8     5           2     0    61     2
July 25        -     -     -     -           1     1    50     3
July 27        2     0     4     3           3     0   120     0
July 30        2     1     6     2           7     5    75     0
August 1       5     0    12     2           5     1    51     0
August 3       -     -     -     -           0     2    25     1
August 6       2     2    10    20           1     0   111     5
August 8       4     0    26     2           7     1   101     3
August 10      -     -     -     -           -     -     -     -
August 13     11     0    44    10           0     0    57     4
August 15     12     0    18     6           2     0    82     0
August 17      -     -     -     -           0     0     4     2
August 20      -     -     -     -           4     0    20     3
August 22      4     0    25     9           -     -     -     -
August 27     20     2    50     9           -     -     -     -
*****

```

GSB = green stink bugs; BSB = brown stink bugs;
 CEW = corn earworms; HW = hornworms

Cooperators: D. M. Price (Seven Springs); Willie Howell (Goldsboro)

From: Norman E. Harrell, Agricultural Extension Agent, Wilson County

Light Trap Data from Wilson County

```

*****
                        Number of Adult Insects
*****
                Lucama      Pender's Xrds      Sims      Fountain
*****                *****
Date           CEW  BS  GS   CEW  BS  GS   CEW  BS  GS   CEW  BS  GS
*****
July 16        -   -   -     -   -   -     -   -   -     4   0   9
July 18        -   -   -    14   0   1     0   0   2     4   0  25
July 20        -   -   -    10   0   0     3   0   0    18   0  24
July 23       12   0   0    17   0   1     0   0   0    37   0   3

```

July 25	2	0	1	25	0	0	1	0	0	13	0	3
July 27	4	0	2	15	0	1	4	0	0	20	0	14
July 30	7	0	2	12	0	1	9	0	0	36	0	26
August 1	4	0	0	12	0	0	0	0	0	26	0	0
August 3	6	0	1	31	0	0	0	0	1	58	0	10
August 6	25	0	6	46	0	2	22	0	3	121	0	60
August 8	25	3	2	28	0	1	11	0	3	94	0	78
August 10	3	1	2	17	0	1	4	0	2	27	0	38
August 13	4	1	0	43	0	0	3	0	0	12	0	11
August 15	38	0	5	62	0	0	1	0	0	29	0	5
August 17	8	0	0	26	0	0	5	0	2	48	0	5
August 20	17	0	0	-	-	-	4	0	2	58	0	10

Locations: Lucama, Pender's Crossroads, Sims and Fountain
 Monitored by: Chris Bass, Adam Gardner, Thad Sharpe and Barbara Smith

Recommendations for the use of chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by North Carolina State University, North Carolina A&T State University or North Carolina Cooperative Extension nor discrimination against similar products or services not mentioned. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage regulations and examine a current product label before applying any chemical. For assistance, contact an agent of North Carolina Cooperative Extension.

Employment and program opportunities are offered to all people regardless of race, color, national origin, sex, age or disability. North Carolina State University, North Carolina A&T State University, U.S. Department of Agriculture, and local governments cooperating.

