

## 2016 Eastern Catskills NABA Butterfly Count

The 10<sup>th</sup> annual Eastern Catskills North American Butterfly Association (NABA) Fourth of July Butterfly Count was conducted on June 25, 2016, the traditional last Saturday of the month. Sunny skies with little or no wind and very warm temperatures (70- 87° F) dominated the count day for only the second time in the ten-year history of this late June survey, typically hampered or shortened by rain and/or dark cloudy skies.

Despite a relatively ideal weather scenario, excessive heat and very dry conditions leading up to and including count day apparently limited some butterfly activity and may have adversely affected emergence of some species, with hairstreaks and skippers most notably down in numbers. No measurable rainfall for the preceding twenty days, combined with consistently hot and sunny weather had taken a toll on some nectar resources and appeared to negatively impact overall butterfly abundance. Common Milkweed, a major nectar source and butterfly attractant that is typically at or near peak bloom during this count, was largely flowerless or aborting blossoms soon after opening.

Thirteen observers in five field parties encountered a total of **1,392 individuals** of **40 adult butterfly species**, plus three additional unique immature species (Spicebush Swallowtail, Viceroy, and Monarch). Diversity was close to average, just two species below our 9-year average of 42 species/year. Abundance was nearly identical to our average of 1,404 individuals/year. Despite the continuing loss of one field party and a few traditional target sites no longer receiving any coverage, our collective effort for the overall count circle was above average due to sunny weather conditions extending our count times and allowing for better coverage of newer and more productive sites.

There were no phenomenal flights of hairstreaks this year, but one new species (**Bronze Copper** at Poet's Walk) and one new sub-species (**White Admiral** from Onteora Lake) were added to the count composite, advancing our cumulative ten-year total to 66 species. Barry Haydasz found the late day Bronze Copper and writes, "Bronze copper was an end of day surprise. Engine was running when it went by. Thought it was a satyr, but maybe a ringlet - which we didn't have. I followed and got a couple good looks when it landed. Ran back to turn off the bike and grab the camera. It was gone but the battery was dead anyway."

A new high count was recorded for **Great Spangled Fritillary** (311, eclipsing 259 in 2009), and three **Hackberry Emperors** tied our previous high count from 2013. Also noteworthy were 12 **Hoary Edge** (our second highest count since 22 in 2007), 60 **Meadow Fritillaries** (second highest count since 75 in 2014, and well above our nine-year average of 38/year), and 103 **Baltimore Checkerspots** (second highest count since 117 in 2014, well above our nine-year average of 41/year). We failed to find any life stage of Giant Swallowtail again this year; Pearl Crescent and Question Mark were noteworthy by their total absence; we did not encounter an adult stage Spicebush Swallowtail or Viceroy for only the second time in the history of this count; and for the first time in our ten-year history we did not record a Delaware Skipper on count day.

Below is a summary of the count results. A big thank you to all of the participants for enduring the hot and dry conditions and maximizing our coverage with a limited number of field parties. Next year's count is scheduled for Saturday, **June 24, 2017**, with Sunday (25 June) reserved as a rain date. Please mark your calendars and save the dates. – Steve M. Chorvas (Compiler)

**Adult Butterflies:** Black Swallowtail (8), Eastern Tiger Swallowtail (3), Cabbage White (298), Clouded Sulphur (85), Orange Sulphur (4), American Copper (4), **Bronze Copper (1)**, Banded Hairstreak (5), Striped Hairstreak (1), Gray Hairstreak (1), Eastern Tailed-Blue (35), Summer Azure (4), **Great Spangled Fritillary (311)**, **Meadow Fritillary (60)**, **Baltimore Checkerspot (103)**, Eastern Comma (2), Mourning Cloak (1), American Lady (2), Red Admiral (5), Red-spotted Purple (1), **White Admiral (1)**, **Hackberry Emperor (3)**, Tawny Emperor (1), Northern Pearly-eye (6), Appalachian Brown (5), Little Wood-Satyr (65), Common Ringlet (4), Common Wood-Nymph (13), Silver-spotted Skipper (26), **Hoary Edge (12)**, Southern Cloudywing (1), Northern Cloudywing (14), Wild Indigo Duskywing (1), Least Skipper (79), European Skipper (137), Peck's Skipper (6), Tawny-edged Skipper (5), Northern Broken-Dash (7), Little Glassywing (30), Hobomok Skipper (5), Dun Skipper (4), *Grass-Skipper "Witch" sp.* (28), other *Grass-Skipper sp.* (5).

**Immature Butterflies:** Spicebush Swallowtail (8 caterpillars [cats] on Spicebush), Baltimore Checkerspot (25 cats on English Plantain), American Lady (12 cats on Pearly Everlasting), Viceroy (2 eggs and 15 cats on Aspen), Monarch (2 cats on Common Milkweed), Silver-spotted Skipper (3 cats on Black Locust), Hoary Edge (2 eggs and 14 cats on Showy Tick-trefoil), Wild Indigo Duskywing (5 cats on Wild Indigo).

### Participants, Field Parties and Field Party Effort (Miles on Foot):

**Northern Area** (sites 1-9) – Steve Chorvas, Alan Beebe (08:00 – 20:15 / 12.25 hrs. / 4 miles)

**Northern Area** (sites 11-16) – Frank Murphy, Deb Ferguson (09:15 – 17:45 / 8.5 hrs. / 5.2 miles)

**Dutchess Area** (site 1) – Barry Haydasz, Maha Katnani, Barbara Mansell (09:00 – 16:15 / 9.25 hrs. / 3 miles)

**Southern Area** (sites 1-8) – Mark DeDea, Bob Miller, Jessica Prockup, Wendy Tocci (09:15 – 17:15 / 8 hrs. / 1.75 miles)

**Southern Area** (site 11) – Thomas Crepet, Joe Bridges (9:00 – 01:30 / 4.5 hrs. / 3 miles)

**Party-hours:** 42.50 **Party-miles:** 17.00 **Weather:** 76 -100 % Sunshine AM and PM **Temperature:** 70 - 87° F **Wind:** Calm.

10 <sup>th</sup> Annual Eastern Catskills NABA Fourth of July Butterfly Count June 25, 2016		Northern										Dutchess						Southern																					
		Seamon Park - HITS	EBNP	Kolar Rd	Great Vly WMA	West Camp Field	Dave Elliott Meadow	Dave Elliott Utility Cut	Dave Elliott Road	Mt. Airy/Hommel PL		Northern	Bristol Beach SP	Lauren Tice Fields	Thorn Preserve	High Woods MUA PL	Glasco PL	Falling Waters		Dutchess	Poet's Walk		Southern	Jockey Hill	Rte 28 (Onteora Lake)	Onteora Lake	Kingston Reservoir	Hallinan Hill Utility Cut	Fehr Fields	Ulster Landing Park	Ulster Landfill			Southern	IBM Rec. Fields				
Total	Species	1	2	3	4	5	6	7	8	9		11	12	13	14	15	16		1			1	2	3	4	5	6	7	8			11							
8	Black Swallowtail											1		1					2	2													5	5					
3	Eastern Tiger Swallowtail	1				1																1						1				1	1						
298	Cabbage White	46	3	7	10	7	7	8	2	2		95	6	9	74		6		13	13		125	41	1	12	7	2	28	32	2			19	19					
85	Clouded Sulphur	2				2						31	1	1	29				9	9		37	4					12	9	12			6	6					
4	Orange Sulphur																		1	1		3								3									
4	American Copper	3								3		1		1																									
1	Bronze Copper																		1	1																			
5	Banded Hairstreak	2					1			1																						3	3						
1	Striped Hairstreak	1					1																																
1	Gray Hairstreak	1				1																																	
35	Eastern Tailed-Blue	14					5	6		3		4	1		3				3	3		11	2	1	1			4	2	1			3	3					
4	Summer Azure	2		1		1																2	1		1														
311	Great Spangled Fritillary	77		11	10	2	7	15	22		10	78	1	1	53	19	1	3	25	25		114	54		7	11	5	18	17	2			17	17					
60	Meadow Fritillary	8				8						20		1	18				17	17		15						8	6	1									
103	Baltimore Checkerspot	1			1							64	10		54							38	3					35											
2	Eastern Comma	2		1	1																																		
1	Mourning Cloak	1		1																																			
2	American Lady											2	1			1																							
5	Red Admiral	4		3	1							1			1																								
1	<i>Red-spotted Purple</i>																					1			1														
1	<i>White Admiral</i>																					1			1														
3	Hackberry Emperor	3			2	1																																	
1	Tawny Emperor	1			1																																		
6	Northern Pearly-eye	6		3	1	2																																	
5	Appalachian Brown	5		4	1																																		
65	Little Wood-Satyr	24	4	6	3	1		5	3		2	12	4		7				6	6		9	1	1	1			5	1				14	14					
4	Common Ringlet											2			1							2	1									1							
13	Common Wood-Nymph											4			4							5	5	4	2				1	1									
26	Silver-spotted Skipper	11	3	2	2		1	1	1		1											10	10	4	1	2						1		1	1				
12	Hoary Edge	11						5		6																													
1	Southern Cloudywing	1					1																																
14	Northern Cloudywing	2				1	1																12	4		1			1	6									
1	Wild Indigo Duskywing																															1							
79	Least Skipper	36	1	19	1		2	6	4		3	11	6		5							6	6	25	18									4	3			1	1

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		1	2	3	4	5	6	7	8	9		11	12	13	14	15	16		1			1	2	3	4	5	6	7	8				11					
137	European Skipper	5					4			1			22	10		12						15	15		94	81		5			5		3			1	1	
6	Peck's Skipper	3				3																		3						3								
5	Tawny-edged Skipper	1								1			3	2					1					1						1								
7	Northern Broken-Dash	6		1			2	3																											1	1		
30	Little Glassywing	14		4			3	5			2											6	6		10	6						2	2					
5	Hobomok Skipper	3		3																		2	2															
4	Dun Skipper	4		2			1	1																														
28	"Witch" sp.	25		5			6	12			2		3			3																						
5	Skipper sp.												5		2	1		1	1																			
<b>1,392</b>	<b>Total Individuals</b>	<b>326</b>	<b>11</b>		<b>34</b>	<b>7</b>	<b>45</b>	<b>68</b>	<b>49</b>	<b>2</b>	<b>37</b>		<b>359</b>	<b>42</b>	<b>14</b>	<b>267</b>	<b>20</b>	<b>2</b>	<b>14</b>		<b>121</b>	<b>121</b>		<b>514</b>	<b>220</b>	<b>5</b>	<b>29</b>	<b>18</b>	<b>7</b>	<b>127</b>	<b>80</b>	<b>27</b>			<b>72</b>	<b>72</b>		
<b>40</b>	<b>Total Species</b>	<b>32</b>											<b>16</b>								<b>15</b>			<b>22</b>												<b>12</b>		

Immature Butterfly Species	Egg(s)	Caterpillar(s)	Pupa(s)	On (plant/surface)	Location(s)
Spicebush Swallowtail		8		Spicebush	Northern – Dave Elliott Meadow
Baltimore Checkerspot		25		English Plantain	Northern – Dave Elliott Meadow (24), Kolar Rd (1) all post-hibernation
American Lady		12		Pearly Everlasting	Northern – Malden Gardens (4), D. Elliott PL North (8)
Viceroy	2	15		Aspen	Northern – DE PL North (2/4), Meadow (5), Hom. PL (6)
Monarch		2		Common Milkweed	Northern – West Camp Road
Silver-spotted Skipper		3		Black Locust	Northern – Dave Elliott Powerline North
Hoary Edge	2	14		Showy Tick-trefoil	Northern – Dave Elliott Powerline North
Wild Indigo Duskywing		5		Wild Indigo	Northern – Hommelville Powerline South

### Participants, Field Parties and Field Party Effort

**Northern Area** (1-9) – Steve Chorvas, Alan Beebe (08:00 – 20:15 / 12.25 hrs. / 4 miles)  
**Northern Area** (11-16) – Frank Murphy, Deb Ferguson (09:15 – 17:45 / 8.5 hrs. / 5.2 miles)  
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**Observers:** 13 **Field Parties:** 5 **Party-hours:** 42.50 **Party-miles:** 17.00 **Weather:** AM Sunshine: 76 -100 % **PM Sunshine:** 76 -100 % **Temperature:** 70 - 87° F **Wind:** Calm  
**Notes:** **New species:** Bronze Copper. **New sub-species:** White Admiral. **New High Count:** Grt. Spangled Fritillary (259 in 2009). **High Count:** Hackberry Emperor (tied previous high count in 2013). Second highest count for Hoary Edge since 22 in 2007. Very dry conditions on count day, no measureable rain over past 20 days leading up to count day.