

THE PEARLY-EYE

Field Reports of the NABA North Jersey Butterfly Club

Volume 4 February 2005

Summary of 2004 Fourth of July Butterfly Counts

by Jim Springer

Although I'm not sure that anyone would have predicted it, it was a very good year for the 2004 NABA Butterfly Counts in northern New Jersey. By the time the count period rolled around, not only were most of the regular butterflies flying, but some later broods of species not normally found on counts were already emerging. A total of 70 species was seen on the northern NJ counts compared to 68 in 2003 (this does not include the Lakehurst count). Four of the counts, including the longrunning Springdale census, set record-high species totals, and every count, except for Lakehurst, had at least one new species. Unfortunately, there was no Raritan Canal count this year because many regulars were butterflying in other parts of the world.

The Lakehurst count was run on the earliest date, June 19th, in its 10-year history. The number of species and total number of butterflies came close to the 5- and 10-year averages. However, the record number of 19 Appalachian Browns (previous high was 3) was surprising. Also, the 35 Dotted Skippers were very gratifying, the result of finding new areas in Collier's Mills WMA during the State Wildlife Management Areas Butterfly Survey. Finally, an early-emerging Georgia Satyr kept that species from being missed on count day.

The second Mercer County count was held a month earlier than last year, and a record 40 species were seen, including 9 that were new for the count. Hackberry Emperor was a good find for the area. The large numbers of Cabbage (1801), Pearl Crescents European Skippers (734), and Little Glasswings (497) represented two-thirds of the butterflies seen, and kept all the observers hopping.

A record 30 species and 902 individuals were seen on the Sandy Hook count. These included 5 new species: Pearl Crescent, Eastern Comma

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The Return of Milbert's Tortoiseshell to New Jersey by Wade and Sharon Ann Wander

With only 2 sightings in the 1980s and 1990s, the great invasion of Milbert's Tortoiseshell (MT) in 2001 came as a great surprise to all of us. But who would have thought that this event, as exciting as it was, was merely a warm-up act for the extravaganza that occurred in 2004. Unlike the 2001 incursion that was largely confined to the Wallkill River NWR in northern Sussex County (an interesting phenomenon in itself) and was of short duration, the 2004 invasion, like a strong cold front, pushed down to Hunterdon County and had more staying power.

It all started off innocently enough with a sighting of a worn MT on Crater Lake Road in the Delaware Water Gap National Recreation Area (DWGNRA) by Ken Witkowski on the early date of May 1. It would be nearly a month later before the next sighting in Hunterdon County by Tony McBride. After that the floodgates opened up with frequent sightings in Sussex County until July 30.

Let us examine these sightings in greater detail. According to Arthur M. Shapiro (The Butterflies of the Delaware Valley, 1966) MT (then known as Small Tortoise Shell) had 4 broods in southern and central New Jersey and southeastern Pennsylvania (May, July, late August, and late Septemberearly October.) Other sources indicate that 2 or 3 broods would be more likely in northwestern NJ. Overwintering is as an adult.

This then suggests that the worn individual seen on May 1 overwintered. The condition (when noted) of every MT reported from May 27 to June 8 was fresh, indicating that the emergence of the first brood probably occurred over several weeks in May. All 3 sightings from June 20 to June 27 were of slightly to very worn individuals. Fresh MTs were then noted from July 7 to July 20 indicating the emergence of a second brood sometime in late June or early July. This is consistent with the timing of the emergences of the first 2 broods as stated by Shapiro. All of these observations strongly suggest that MT was, in 2003-2004, a resident species. This is bolstered by the observation by Alice Koster, et al. of a MT laying eggs on Tall Nettle (a usually non-stinging relative of Stinging Nettle in the genus Urtica) at Silver

Continued on p. 2 (Summary)

Wild Indigo Duskywing, Least Skipper and Dun Skipper. All the Hackberry specialists (Tawny Emperor, Hackberry Emperor, and American Snout) were seen, including an incredible 146 snouts! Sandy Hook is probably the best spot in northern NJ to see these 3 butterflies in one place.

The Great Swamp count had a solid, but unexceptional, year. However, White M Hairstreak was a great find and new for the count, and represented the only one seen on any of the 2004 censuses. In addition, Fiery Skipper was seen for only the second time in the 11-year history of the count.

On the Wallkill River NWR count, a record-high 45 species were found. Common Buckeye, Hackberry Emperor, Wild Indigo Duskywing, Mulberry Wing and Broad-winged Skipper were all new for the count. Banded Hairstreaks bounced back, with 78 noted this year compared to the singletons seen in 2002 and 2003.

Last, but by no means least, was the Springdale count. A record 59 species (highest ever for any 4th of July count in NJ!) were tallied, including an amazing 3 new species: Little Yellow, Juniper Hairstreak (seen by half the parties) and Milbert's Tortoiseshell. This, plus the fact that American Snout, Variegated Fritillary, Silver-bordered Fritillary, Common Buckeye, Common Ringlet, Horace's Duskywing, and Common Checkered-Skipper were seen for only the second time, made it a banner year for a count that has been Of course, it helps to have lots of held since 1992. observers, attracted, no doubt, by the great butterfly habitat and fantastic barbeque supper served at Wade and Sharon's afterwards. Some numbers of note were the 111 American Coppers (previous high of 27), the 96 Appalachian Browns (previous high of 40), and the 272 Black Dashes (previous high of 68).

Thank you very much to all the count compilers and observers whose combined efforts helped to make this such a great year. Let's keep the momentum going!

The Pearly-Eve 2004 is a publication of the NABA North Jersey Butterfly Club, a chapter of the North American Butterfly Association, Inc (NABA). It is intended to highlight the activities of the Club and to provide an overview of the status of butterflies in northern New Jersey this season (from Mercer and Monmouth counties north). Many thanks to Sharon Wander for providing invaluable editorial assistance for this issue. Next year's (2005) butterfly sightings should be sent to editor Tom Halliwell, 19 Kings Road, Netcong, NJ 07857 (tbhalliwell@worldnet.att.net).

The Club meets on the first Tuesday of the month (except in July when there is usually no regular meeting) at 7:30 p.m. in the Haggerty Education Center of the Frelinghuysen Arboretum, 53 East Hanover Avenue, Morristown, NJ. A list of field trips, directions to meetings, and other useful information can be found on the chapter's website at http://www.naba.org (click on chapters). The officers for 2005 are:

President, Tom Halliwell (tbhalliwell@worldnet.att.net) Vice-President, Michael Pollock (jmpollock1@aol.com) Treasurer, Deedee Burnside (deedeeburnside@optonline.net) Secretary, Alice Koster (ajkoster@aol.com)

Membership in the NABA North Jersey Butterfly Club is included with annual membership in the North American Butterfly Association. To join send \$30 (\$40 family) to NABA Membership Services, 4 Delaware Road, Morristown, NJ 07960, or go to < http://www.naba.org > for further information.

NABA NORTH JERSEY BUTTERFLY CLUB 2004 PROGRAM OF MEETINGS

January 6- "Butterflies of Chiapas, Mexico" by Jeff Glassberg

February 3- "Turkish Blues" by Ahmet Baytas

March 2- "Northern NJ Butterflies of March, April, & May" by Chris Williams

April 6- "An Earthwatch Butterfly Project in Vietnam" by Joan Theubel

May 4- "Butterflies in Africa" by Patti Murray

June 1- "Northern NJ Butterflies of June, July, and August" by Tom Halliwell

August 3- "The Green Marvel vs. the Horrid Zale: What's Up With Moths?" by Wade and Sharon Wander

September 7- "Butterflies of the Florida Keys- the Most Endangered Butterflies in the U.S." by Jim Springer

October 5- "Mediterranean Butterflies of Turkey" by Ahmet Baytas

November 9- "Culture, Art, and Butterflies in Italy" by Jeff Glassberg

December 7- Member's Night

2004 FIELD TRIPS

May 8-- Mountainside Park, Morris County: 11 species, 14 participants. Patti Pfeifer, leader.

May 9-- Colliers Mills WMA, Ocean County: 14 species, 9 participants. Chris Williams, leader.

June 5-- High Point SP, Sussex County: RAINOUT.

July 4-- Hamburg Mountain WMA & Vernon, Sussex County: 29 species, 20 participants. Sharon & Wade Wander and Ken Witkowski, leaders.

July 17-- Karen Nash Memorial Butterfly Garden, Washington, Warren County: 20 species, 10 participants. Ahmet Baytas, leader.

July 25-- Skylands Botanical Gardens, Ringwood, Passaic County: 25 species, 19 participants. Tom Halliwell, leader.

August 14-- Flatbrookville & Walpack, Sussex County: 30 species, 17 participants. Tom Halliwell, leader.

August 28- Helmetta & Monroe Twp., Middlesex County: 28 species, 15 participants. Jim Springer, leader.

September 11 & 12-- Cape May County: 38 species, 17 participants. Joe Burgiel, leader.

Overview of the North Jersey 2004 Butterfly Season

by Tom Halliwell

Our picture of the 2004 season is drawn from thousands of butterfly sightings sent in by observers from around the region (we define northern New Jersey as the 13 counties from Monmouth and Mercer north). This year slightly fewer observations were reported. Coverage was excellent in northwestern New Jersey and in Monmouth County, where many contributors submitted regular reports. The remainder of North Jersey is blessed with fewer active butterfliers (though we warmly thank those of you who do regularly send in your records). We also continued to benefit from the completion of the State Wildlife Management Areas butterfly survey that was begun last year.

Over the course of 4 issues of The Pearly-Eye, each year has proven to be distinctly different for butterflies in the region. Populations boom and crash, emerge early and late, abandon traditional sites and colonize new ones, etc., etc. The mix of butterflies never seems the same; each year has its own feel.

The 2004 season was no exception. It was another "early" year. An impressive 28 species (22 residents and 6 immigrants) set or tied their earliest sighting dates; 11 were observed record-late. In some ways this is reminiscent of the very early 2002 season. However, 2002 was early from the get-go, the result of a very warm winter and a hot April. In contrast, the winter of 2003-04 brought normal temperatures, with a bitter-cold January. Snow in March and persistent cool weather into April did not offer our early spring butterflies much encouragement. By mid-May, however, temperatures turned unseasonably hot, and the butterflies soon responded. Of the 22 resident species that set or tied earliest-ever dates this year, 18 emerged between late May and late June! Summer was somewhat cool and rather wet. Many species seemed to "finish up" a bit early, making late-summer butterfly lists dismayingly sparse!

As always, a few rarities added spice to the season. Sussex County's inaugural Zebra Swallowtail was the first in the region in 4 years. A Gray Comma, a year and a day after last year's, again graced Sussex County. Unfortunately, both the swallowtail and comma were "one-day wonders." Quite the contrary, and probably the story of the season (see article on p. 1), Milbert's Tortoiseshell irrupted in the northwest, and may be breeding!

The southern immigrants were a big story early on; something was definitely going on down in Dixie! By the end of May, Cloudless Sulphur, American Snout, Variegated Fritillary, Painted Lady, Common Buckeye, Monarch, Common Checkered-Skipper, and Sachem had already been reported, 3 on record-early dates. By early July, Little Yellow and Fiery Skipper had set new arrival records. Only Ocola Skipper, which showed up, as usual, in August, and Long-tailed Skipper, which no one saw at all, exempted themselves from the early parade. Although many ventured inland, for the most part these early invasions failed to sustain and build; moderate numbers were the rule. The single exception was American Snout, a few hundred of which congregated at Sandy Hook in late June.

All the regular swallowtails appeared in superb numbers. Top

counts of Pipevine, Black, and Eastern Tiger swallowtails must have been near record levels.

Our familiar whites and sulphurs appeared to do well, especially in summer. A lone report of Checkered White was not so encouraging. Perhaps an August-to-October survey at Sandy Hook, home for most recent reports, would be worthwhile.

It was another excellent year for American Copper; several sites produced counts of 100 or more. However, both Bronze and Bog coppers went unreported; the former apparently in real trouble, the latter probably not. It seemed a fine season for many hairstreaks. Banded, Hickory, and Red-banded especially stood out. Two reports of Oak Hairstreak and 4 of White M were very welcome. On the down side, Acadian Hairstreak seems to be barely holding on, and Frosted Elfin went missing this year.

Northern Metalmark sites and counts were up. thanks in part to a survey sponsored by The Nature Conservancy. And American Snouts seemed to appear everywhere.

Unfortunately, Great Spangled Fritillaries continued to be seen in underwhelming numbers. But 8 reports of Aphrodite were excellent, and Meadow Fritillary numbers remained high. Best of all, Silver-bordered Fritillary may be on the upswing, with sightings at 3 new locations. Hopefully these sites will be rechecked next year to determine whether stable colonies are present. Pearl Crescent and Baltimore Checkerspot both had excellent years, but Harris' Checkerspot again disappointed.

Among the True Brushfoots, outstanding numbers were posted by Eastern Commas (again!) and Compton Tortoiseshells, not to mention the unexpected Milbert's Tortoiseshells. Red Admirals, though, were rather scarce. Both Hackberry and Tawny Emperor were much in evidence, but no second brood Tawnies were noted.

The Satyrs seemed to prosper. Northern Pearly-eye, Appalachian Brown, Common Ringlet, and Common Wood-Nymph all appeared in big numbers. Monarch counts, on the other hand, were alarmingly low, especially migration counts. We can only hope that those Monarchs that reach Mexico will have a high survival rate this winter.

Silver-spotted Skipper did well again. Southern Cloudywing was reported from more sites than usual, and, for the third year in a row, a second brood flew in central New Jersey. Observers found additional locations for the scarce Sleepy Duskywing, and Horace's Duskywing appeared far more widespread than usual. Conversely, the common Dreamy and Juvenal's duskywings did not have especially good seasons.

On balance, the resident Grass Skippers seemed to do well in 2004. Once again, Swarthy Skipper produced a huge second brood in Monmouth County. Least Skippers rebounded to their normal ubiquity, exceeded only by the uncountable legions of European Skippers. Crossline Skipper appeared a bit more widespread than usual, and both Northern Broken Dash and Little Glassywing recovered from last year's lows. Black Dash was seen in superb numbers, and Dion Skipper sightings

increased from last year's single report. Most exciting was the unexpected discovery of 3 Dion Skippers in August in Middlesex County, and two very late, fresh Delaware Skippers in Monmouth County. On the down side, Cobweb Skipper was poorly reported, Arogos Skipper was seen only once, and Common Roadside Skipper continued to elude observers altogether.

Hopefully you will enjoy the species accounts which follow. Thanks to all of you who contributed sightings to make these accounts possible. Please continue to send in your regular reports in the upcoming 2005 season to <tbhalliwell@att.net>. We need reports from everyone – and not just the uncommon butterflies. An accurate picture of the season can be drawn only if we have sufficient data on all the butterflies. Please participate next year!

Annotated List of Northern New Jersey Butterflies for 2004

compiled by Tom Halliwell

Pipevine Swallowtail In addition to the species' stronghold on the Palisades in Bergen County, reports were received from Monmouth, Essex, Morris, and Sussex counties. Initially found 5/24 (2) KVSP, SUS [TH], though probably earlier on the Palisades. Peak spring count, a whopping (150+) 6/7 Palisades Interstate Park, BER [TF]. Summer reports topped out at (30) 8/9 Palisades Interstate Park [VC], and a 10/28 (1) sighting there [VC] set a new late date by four weeks.

Zebra Swallowtail A major surprise: 7/2 (1) Crater Lake Road, SUS [SW, WW]. This rarity had not been seen in northern NJ since 2000. While natural vagrancy cannot be proven, this area atop the Kittatinny Ridge is quite wild and probably not a typical location for butterfly releases.

Black Swallowtail A peak year; seen widely and in excellent numbers! First noted 4/10 (1) Mercer County Park, MER [FB]. Spring Maxima: (20+) 5/1 Big Brook Park, MON [VC]; (20+) 5/23 Wallkill River NWR, SUS [TH, CM, DB]; (20) 5/22 Sparta Twp., SUS [WW, SW]. Summer tallies also huge: (111) Wallkill River NWR [WR4JC]; (20+) 7/22 AT lands, Vernon, SUS [VC]; (20) 6/20 Pole Farm, MER [MC4JC]. Final sighting 10/9 (1) Oldwick, HUN [DT, et al.].

Giant Swallowtall Last observed in 2000.

Eastern Tiger Swallowtail Another fine year. Observed initially 4/18 (1) White Lake, WAR [TM]. High spring count (25) 5/15 Walpack Twp., SUS [SW, WW]. Top summer numbers spectacular: (210) 8/5 Willowwood Arboretum, MOR [TH]; (100+) 8/10 Schooley's Mt. Park, MOR [VC]. Numbers dropped off dramatically in late August. Final report 10/4 (1) Montclair, ESS [AB].

Canadian Tiger Swallowtail None reported since the 2001 first state record.

Spicebush Swallowtail Also very numerous and widespread. Initially found 4/17 (1) Lebanon Twp., HUN [RY], a new early date. Peak spring tallies: (18) 5/23 Hilltop Reservation, ESS [KD]; (15) 5/29 Assunpink WMA, MON [PW, CW]. Summer counts higher: (25+) 8/5 Willowwood Arboretum, MOR [TH]; (25+) 8/10 Schooley's Mt. Park, MOR [VC]; (25+) 8/20 Black River WMA, MOR [VC]. Numbers plummeted in late August and none were seen after 9/24 (1) Somerset, SOM [PW].

Checkered White Disappointingly, just a single report this year: 8/25 (1) Sandy Hook, MON [JB].

Cabbage White Noted initially 3/7 (1) Sandy Hook, MON [KK]. Top spring numbers: (100+) 5/1 Frankford Twp., SUS [TH]; (100+) 6/8 Stony Brook-Millstone Reserve, MER [SM, FB]. Best counts of year came in latter half of June: (1000+) 6/26 Hilltop Reservation, ESS [KD]; (850) 6/20 Pole Farm, MER [MC4JC]; (540) 6/20 Whittingham WMA, SUS [MB, JB]. Final sighting 11/15 (1) Big Brook Park, MON [VC].

Falcate Orangetip Reported only from Monmouth, Morris, Passaic, and Sussex counties. Initially found 4/17 (4) Mountainside Park, MOR [JG], where peak count noted 4/24 (20) [AB]. Only other location with double-digit numbers was Assunpink WMA, MON, 4/29 (10) [CW, PW]. Last sighting 6/2 (2) Cranberry Lake, SUS [JB].

Clouded Sulphur Fine numbers reported once again. First seen 4/22 at both White Lake, WAR (2) [JB, MB] and Lenape Park, UNI (1) [HB]. Spring counts topped out at (25+) 5/12 Wallkill River NWR, SUS [TH]. Summer peaks higher: (165) 7/10 Wallkill River NWR [WR4JC]; (50+) 7/8 Schooley's Mt. Park, MOR [VC]; (50+) 8/3 KVSP, SUS [TH]. Good numbers persisted into September as indicated by (50+) 9/15 AT lands, Vernon, SUS [VC]. Last found 11/17 (1) Somerset, SOM [PW].

Orange Sulphur More numerous

than in 2003. First seen 4/19 (1) Sandy Hook, MON [KK]. As usual, spring counts low, especially northwest, where no counts hit double figures until late June. Top spring numbers just (20) 5/1 Big Brook Park, MON [VC]. Summer maxima: (279) 6/30 Sandy Hook [SH4JC]; (254) 7/3 Troy Meadows, MOR [GS4JC]; (149) 7/10 Wallkill River NWR, SUS [WR4JC]. Record late & never-to-be-later: 12/31 (1) Belleville, ESS [VC].

Cloudless Sulphur A moderate invasion produced sightings in Monmouth, Middlesex, Somerset, Morris, Essex, and Bergen counties. unexpected vanguard discovered 5/15 (1) Sandy Hook, MON [SB, et al.], set a new early date by more than a month. However, no others reported until 8/12 (2) Sandy Hook [KK], after which the species could be found regularly at the Hook. Peak counts at Sandy Hook: (23) 9/22 [VC]; (22) 9/10 [KK]; (20) 9/13 [SB]. The only sighting north of the Piedmont occurred 9/3 (1) Black River WMA, MOR IJS1. Last observed 10/31 (1) Neshanic Station, SOM [MP], a new late date.

Little Yellow Only 3 sightings. Interestingly, none of the 3 turned up at the more expected coastal sites like Sandy Hook. First report 6/27 (1) Assunpink WMA, MON [CW, PW], a new early date by a week. Other observations: 7/11 (1) KVSP, SUS [S4JC] and 8/28 (1) Mounts Mills, MID [NABA]. The latter individual was a rare white-form female.

Harvester Two reports from the spring brood and one from summer. Early sightings: 6/21 (1) Bethlehem Twp., HUN [DF] and 6/24 (1) Flatbrook-Roy WMA, SUS [TH]. Second-brood observation: 8/9 (1) Scherman-Hoffman Sanctuary, SOM/MOR [MA].

American Copper Very widely reported this year. First seen 4/11 (1) Sandy Hook, MON [StW]. Top spring counts: (100+) 5/25 Flatbrookville, SUS [TH]; (50+) 5/27 High Point SP, SUS

[FW, DB]. Summer numbers even better: (100s) 6/17 Big Brook Park, MON [VC]; (150+) 7/6 Kenvil, MOR [DB, FW]; (100+) 7/8 Schooley's Mt. Park, MOR [VC]. Last seen 9/25 (10) Flatbrookville [TH].

Bronze Copper Still not recorded since 1996.

Bog Copper No reports this year, although specific habitat probably not visited at proper time. Last seen in 2003.

Coral Hairstreak Seven locations noted beginning on 6/12 (1) Pole Farm, MER [JS, FB]. Highest count: (21) 6/30 Sandy Hook, MON [SH4JC]. No others reached double figures. Final observation 7/24 (2) Sunrise Mt., SUS [TH].

Acadian Hairstreak Again, just two reports from Sparta Twp., SUS, the only currently consistent site in northern NJ: 6/30 (1) [TM] and 7/7 (1) [TH]. Even at this locale the species was missed more often than found.

Edwards' Hairstreak Four Sussex County locations noted beginning 6/15 (3) Springdale [TH], a new early date. Maximum counts: (11) 6/20 Sunrise Mt. [TH, FW, DB]; (9) 6/17 Springdale [JB]. Also found: Frankford Twp. 7/1 (1) [WW, SW]; Crater Lake Road 7/2 (5) [SW, WW] and 7/11 (1) [S4JC]. Seen last 7/20 (9) Sunrise Mt. [FW].

Banded Hairstreak A fine year following two consecutive poor ones. First report: 6/6 (1) Hilltop Reservation, ESS [KD], a week earlier than prior early date. Top counts excellent: (78) 7/10 Wallkill River NWR, SUS [WR4JC]; (70+) 7/6 PVT @ Stillwater Road, SUS [TH]; (66) 6/26 Blairstown, WAR [SW, WW]; (62) 6/23 Milford, HUN [RH, DH]. Several additional sites produced (25+) in late June-early July. Final sighting 8/9 (1) Palisades Interstate Park, BER [VC].

Hickory Hairstreak Well reported from Sussex, Morris, and Passaic counties. First noted 6/18 (2) Garret Mt., PAS [VC], a new early date. Peak counts: (6) 6/25 Whittingham WMA, SUS [JB, MB]; (5) 6/19 Wallkill River NWR, SUS [TH, KW, FW]; (5) 6/21 PVT @Stillwater Road, SUS [TH]; (5) 7/8 Schooley's Mt. Park, MOR [VC]. Observed last 7/25 (1) Whittingham WMA [WW, SW].

Striped Hairstreak Widely reported, but in typically low numbers. Initially found 6/20 in three locations: Helmetta, MID (5) [TJ]; Baldwin Lake WMA, MER (1) [MC4JC]; and Martin Tract, MER (1) [MC4JC]. The Helmetta report and the

following are the species' high counts: (5) 7/27 High Point SP, SUS [TH]. Last seen 8/9 (1) Montclair, ESS [AB].

Oak Hairstreak A gratifying two records for this northern NJ rarity (after no reports last year): 6/26 (1) Hilltop Reservation, ESS [KD]; 6/27 (1) Weldon Brook WMA, SUS [AB].

Brown Elfin Three sightings from two locations. Seen first 4/22 (3) Millbrook Gap, WAR [ABa]. Crater Lake Road, SUS produced the other two reports: 5/1 (8) [KW] and 5/25 (4) [TH].

Frosted Elfin Distressingly, no reports were received for this species despite searching at the traditional Assunpink WMA, MON site. One hopes this is not the end of the story. Last seen in 2003.

Henry's Elfin Sandy Hook, MON remains the only consistently reported site. This year's sightings began 4/20 (3) [KK]. The rather low peak count of (12) was made 5/1 [KK], while the final observation occurred 5/12 (3) [KK].

Eastern Pine Elfin Six reports from three sites in Sussex and Middlesex counties. Walpack Twp., SUS yielded the first sighting 5/6 (1) [TH] and Flatbrookville, SUS provided the last 5/25 (1) [TH]. In between were other reports from these two hamlets as well as one from Mounts Mills, MID 5/22 (1) [JS]. No reports were of more than two individuals.

Juniper Hairstreak Rather well-reported from Sussex, Warren, Somerset, and Monmouth counties. First brood noted 4/17 (1) White Lake, WAR [TM]. Peak count: (7) 5/12 Sandy Hook, MON [KK]. Last found 5/30 (1) Jenny Jump SF, WAR [SW, WW]. Second brood observed from 7/2 (1) Crater Lake Road, SUS [WW, SW] to 8/3 (1) Somerset, SOM [PW, CW]. High count only (3) 7/17 Fredon Twp., SUS [SW, WW].

White M Hairstreak Four reports widely spaced geographically as well as chronologically: 5/11 (1) Flatbrookville, SUS [TH]; 7/3 (1) Washington Valley, MOR [GS4JC]; 8/7 (1) Big Brook Park, MON [VC]; and 8/22 (1) Willowwood Arboretum, MOR [JB, MB].

Gray Hairstreak Seen across much of northern NJ, but unpredictable and in very small numbers. First noted 4/18 (1) Mountainside Park, MOR [AB, JS]. Spring peak just (2) 5/12 Sandy Hook, MON [KK]. Summer's maximum (4) 6/30 Sandy Hook [SH4JC]. All other reports just 1s and 2s. Last found 9/12 (1)

Sandy Hook [PM, PW, et al.].

Red-banded Hairstreak excellent year with reports from all northern NJ counties except Sussex, Hunterdon. Union, and Hudson. Discovered 5/15 (7) Assunpink WMA. MON [PW, CW] and 5/15 (1) Garret Mt., PAS [AB, FP]. Top spring counts: (15) 6/4 Big Brook Park, MON [VC]; (12) 5/29 Assunpink WMA [CW, PW]. Summer brood produced fine totals in August: (75) 8/8 Mounts Mills, MID JJS, PW, CW]; (50+) 8/7 Big Brook Park [VC]; (24) 8/8 Pigeon Swamp SP, MID [CW, PW, JS]. North of the Piedmont, where rare, singletons found at Schooley's Mt. Park, MOR on 6/30, 7/8, & 8/26 [VC], as well as Merrill Creek Reservoir, WAR on 8/22 [WW, SW]. Last noted 10/26 (1) Atlantic Highlands, MON [SB].

Eastern Tailed-Blue First seen 4/24 at Mountainside Park, MOR (11) [AB] & Assunpink WMA, MON (1) [PW, CW]. Spring peak (20) 4/30 Mountainside Park [SW, WW, AB]. Excellent summer numbers across northern NJ: (100s) 6/17 Big Brook Park, MON [VC]; (84) 6/20 Martin Tract, MER [MC4JC]; (71) 7/3 Troy Meadows, MOR [GS4JC]; (41) 7/29 Wallkill River NWR, SUS [KW, TH]. Last seen 10/13 (1) KVSP, SUS [TH].

Spring Azure complex Reported in rather good numbers. Initially observed 3/29 (1) KVSP, SUS [MB]. Maxima: (50+) 4/22 KVSP [TH]; (50) 4/20 Wallkill River NWR, SUS [KW]; (30) 4/18 Mountainside Park, MOR [JS, AB]. Sightings of worn individuals continued into late May. By mid-May several fresh, pale azures began to be noticed. Some, e.g., 5/15 Flatbrookville, SUS [WW, SW, TH], were probably the "Cherry Gall Azure" member of this complex. Others, especially later in May, could have been early "Summer Azures".

"Summer Azure" First reported 5/27 (1) Somerset, SOM [PM]. Numbers peaked mid-June to mid-July; no observers reported double figures after mid-July. Top counts: (30+) 6/12 Hilltop Reservation, ESS [KD]; (30+) 6/13 Hatfield Swamp, ESS [KD]; (17) 6/30 Sandy Hook, MON [SH4JC]. Last seen 9/22 (1) Walpack, SUS [JB].

Appalachian Azure Reported from six sites in Somerset, Hunterdon, Morris, and Sussex counties. First found 5/15 (20) Sourland Mt., SOM [StW] and 5/15 (6) Black River WMA, MOR [JS]. Peak counts robust: (60+) 5/27 Mt. Joy,

HUN [TM]; (25+) 5/18 Black River WMA [JS, MP, TH]. Last noted 6/22 (1) Culver's Lake, SUS [FW].

Northern Metalmark With a boost from a TNC-sponsored site search [MBi], Metalmarks were reported from six locations in Warren and Sussex counties. Initial sightings on 6/23 at both White Lake, WAR [MBi] and KVSP, SUS [TH], a new early date. Peak counts: (30) 7/1 PVT @ Stillwater Road, SUS [AB]; (25) 6/29 KVSP [MBi]. Last seen 7/15 (1) at White Lake [MBi] and PVT @ Stillwater Road [MBi].

American Snout A large and widely spreading invasion began very early, peaked by late June, and tailed off through late summer. Earliest-ever, by more than a month, was (1) 5/21 Sandy Hook, MON [JC], quickly followed by others inland (e.g., 5/22 (1) Somerset, SOM [PM, PW] and 5/23 (1) Whittingham WMA, SUS [WW, SW]). Peak count a mammoth (300+) 6/24 Sandy Hook [KK, SB, PB, et al.], but already reduced to (146) by the SH4JC on 6/30. Inland peak (15) 7/20 Montague Twp., SUS [TH]. Last individual seen 9/26 (1) Sandy Hook [DB, FW].

Variegated Fritillary This immigrant, too, set a new early arrival date: 5/13 (1) Sandy Hook, MON [DB, FW]. Numbers of Variegateds, however, were quite modest, although found scattered throughout northern NJ. Top counts: (5) 6/23 Walpack Twp., SUS [JZ]; (4) 6/4 Big Brook Park, MON [VC]; (4) 7/3 Lewis Morris Park, MOR [GS4JC]; (4) 7/31 Assunpink WMA, MON [PW, CW]. Last observed 9/22 (1) Sandy Hook [VC].

Great Spangled Fritillary Though widely distributed, very poor numbers were in evidence again. First seen 6/2 at both Walpack Twp., SUS (2) [TH] and KVSP, SUS (1) [WW, SW], tying earliest date. Highest counts: (58) 6/20 Martin Tract, MER [MC4JC]; (51) 7/3 Washington Valley, MOR [GS4JC]; (50) 7/2 Crater Lake Road, SUS [SW, WW]. Last sighting 9/24 (1) KVSP, SUS [TH].

Aphrodite Fritillary Eight reports of single individuals from six locations in Sussex County. Initially seen 6/19 Walpack Twp. [WW, SW], a new early date. Final sighting 9/15 AT lands, Vernon [VC].

Silver-bordered Fritillary A very good year; found at five locations in Monmouth, Middlesex, and Sussex

counties. Sightings at reliable Helmetta, MID colony: 5/22 (18, the peak count) [JS]; 6/27 (1) [TJ]; 8/8 (2) [CW, PW, JS]; and 8/28 (2) [NABA]. The equally reliable Mounts Mills, MID site was fruitful 5/22 (11) [JS]; 7/25 (1) [TJ]; 8/8 (2) [PW, CW, JS]; and 8/28 (2) [NABA]. Additionally, a new locale at Manalapan Twp., MON was discovered 5/22 (1) [JS]. Most exciting were two new sites in Sussex County, where the species had not been seen for several years. One was discovered 7/11 at Crater Lake Road on the S4JC [SW, et al.]. Subsequent sightings made clear that a small colony involving more than one brood had been established: 7/20-7/24 (3) [JZ, WW, SW, et al.] and 9/6 (1) [SW, WW, JB, et al.]. A single individual found at Whittingham WMA, SUS 7/16-7/20 ITH, SW, JB] also raised hopes for a new colony in northwestern NJ. The 9/6 Crater Lake Road sighting was the last.

Meadow Fritillary Very well reported from Sussex, Warren, and, surprisingly, Monmouth counties. First brood found from 4/22 (1) White Lake. WAR [TM] to 5/25 (1) White Lake [TM], with a peak count of (12) 5/11 Walpack Twp., SUS [TH]. Second brood, discovered 6/8 (4) Flatbrookville, SUS ITH, AB, HB], produced the year's top numbers: (a prodigious 100+) 6/19 Walpack Twp. [SW, WW]; (30+) 6/19 Wallkill River NWR, SUS [TH, et al.]. This brood also generated a rare Coastal Plain sighting 6/12 (2) Assunpink WMA, MON [CW, PW]. Final report of second brood 7/11 (4) Walpack Twp. [S4JC]. Third brood initially observed 7/17 (2) Flatbrookville [TH]. Top count (20+) AT lands, Vernon, SUS [VC]. Last seen 9/19 (3) Wallkill River NWR [TH, et al.].

Harris' Checkerspot Unfortunately, no 2004 observations to build on last year's single report.

Pearl Crescent Reported in superb numbers. Initially found 4/24 (3) Assunpink WMA, MON [PW, CW] and 4/24 (2) Mountainside Park, MOR [AB]. Top spring counts: (60+) 5/23 Wallkill River NWR, SUS [TH, CM, DB] and (40+) 5/23 Whittingham WMA, SUS [WW, SW]. Summer totals dwarf spring's: (930) 7/10 Wallkill River NWR [WR4JC]; (393) 7/3 Troy Meadows, MOR [GS4JC]; (194) 6/20 Pole Farm, MER [MC4JC]. Several other (100+) tallies were noted this summer as well. Last encountered 11/15 (1) Big Brook Park, MON [VC], a new late date by nearly two weeks.

Northern Crescent No reports since 1996.

Baltimore Checkerspot Well reported in Sussex and Warren counties. Record-early by nearly a week were (3) 6/4 Stillwater Twp., SUS [SW, WW]. Excellent maximal counts: (100+) 6/21–6/27 AT lands, Vernon, SUS [JL, CM, VC, WW, SW]; (50+) 6/16 Frankford Twp., SUS [TH]. Last seen in several places on the 7/11 S4JC.

Question Mark First reported 4/19 (2) Sandy Hook, MON [KK]. First very fresh dark form 5/16 (1) KVSP, SUS [TH]. On same day pristine light form found 2 miles from dark form [TH]. Obviously "summer form" and "winter form" are not the best terms for dark and light Question Marks. Top counts: (10) 6/27 AT lands, Vernon, SUS [VC]; (7) 6/30 Sandy Hook [SH4JC]; (5) 7/10 Wallkill River NWR, SUS [WR4JC]. Last seen 10/3 (1) KVSP [TH].

Eastern Comma Another superb year! First seen 2/28 (1) Neshanic Station, SOM [MP]. Fairly common through May, although top count only (6) 4/15 KVSP, SUS [ABa]. From June through mid-July commas were heavily reported. High counts exceptional: (44) 7/1 Montague Twp., SUS [MB, JB]; (25) 6/8 Walpack Twp., SUS [AB, HB, TH]; (15) 7/10 Wallkill River NWR, SUS Numerous other reports [WR4JC]. reached double figures as well. Unlike 2003, big numbers did not continue into August and September, although the species remained fairly common. Last found 11/1 (1) Somerset, SOM [PM].

Gray Comma The second year in a row with an appearance by this exceptional rarity: 7/2 (1) Hamburg Mt. WMA, SUS [KW]. Once again, however, the butterfly was not refound despite several days of searching.

Compton Tortoiseshell Noted from Bergen, Passaic, and Sussex counties. First encountered 3/15 (1) KVSP, SUS [TH], followed by eight more reports through April. New summer emergents well-observed; 10 sightings capped by 2 top counts on 7/1: (18) Montague Twp., SUS [JB, MB] & (10) Walpack Twp., SUS [AB, TH]. Following aestivation, only 4 fall observations made, the last 10/31 (1) Sunrise Mt., SUS [WW, SW].

Mourning Cloak First overwintering individuals noted 3/1 at both Far Hills, SOM [MP] and Tatum Park, MON [NK]. Top spring count (4) at several locations and dates. Emergence of fresh Mourning Cloaks by 5/30 (1) Mecca Gap, SUS

[JS]. Highest new brood tally (7) 6/12 Hilltop Reservation, ESS [KD]. Just two reports from late July to mid-September when new brood presumably aestivating. Last seen 11/7 (1) Scherman-Hoffman Sanctuary, SOM [MA].

Milbert's Tortoiseshell (see article on p. 1) An unprecedented year for this rare NJ butterfly. Unlike the big flight of 2001, when many Milbert's Tortoiseshells invaded Wallkill River NWR, SUS, and individuals showed up at two other places, this year at least 10 sites in Warren, and Hunterdon Sussex, counties hosted the species. A worn individual, discovered 5/1 on Crater Lake Road, SUS [KW], kicked off the season with a new early date. The first fresh butterfly appeared 5/27 (1) Mt. Joy, HUN [TM], followed rather soon by reports from several other locales. Peak counts: (8) 6/4 Walpack Twp., SUS [JB, MB]; (9) 7/7 Walpack Twp. [FW, DB]; (7) 7/20 Montague Twp., SUS [TH]. The Walpack peaks, of fresh butterflies more than a month apart, may point to a breeding population. This theory is supported by the multiple sightings made at this spot last year, and, especially, by this year's observation of a female laying an egg on nettle 7/11 [AK, JC, FW, et al.]. Last reported 7/30 (1) Flatbrookville, SUS [TH].

American Lady Good numbers, especially in central NJ. First seen 4/15 (1) Montclair, ESS [AB]. Spring counts: (27) 4/20 Sandy Hook, MON [KK]; (25) 6/4 Big Brook Park, MON [VC]. Summer counts also good: (25) 6/24 Sandy Hook [KK, et al.]; (20+) 8/7 Big Brook Park [VC]; (20) 7/2 Crater Lake Road, SUS [WW, SW]; (18) 7/31 Assunpink WMA, MON [PW, CW]. Noticeable dropoff in numbers from late August. Last seen 11/6 (1) Annandale, HUN [DS].

Painted Lady A modest influx over the whole region, but not easy to find. First noted 5/8 (2) Sandy Hook, MON [TJ] and 5/8 (1) Garret Mt., PAS [HB]. Most reports just 1s & 2s. Best counts: (5) 6/12 Hilltop Reservation, ESS [KD]; (4) 6/4 Thompson Park, MON [VC]. Last encountered 11/25 Sandy Hook [LM].

Red Admiral A bit of an off year; widely reported but in rather low numbers. Seen initially 4/20 (1) Sandy Hook, MON [KK]. No double-digit counts until 6/27 (11) Hatfield Swamp, ESS [KD]. Only other double-figure tallies: (27) 7/10 Wallkill River NWR, SUS [WR4JC]; (12) 7/3 Troy Meadows, MOR

[GS4JC]; (11) 7/3 Great Swamp NWR, MOR [GS4JC]; (10) 8/4 AT lands, Vernon, SUS [VC]. Somewhat scarce by mid-August. Last observed 10/4 (1) KVSP, SUS [TH].

Common Buckeye Arrived early and spread throughout northern NJ. First seen 5/5 (1) Sandy Hook, MON [KK]. Reached Sussex County by 5/23 (1) Whittingham WMA [SW, WW]. Never really built to impressive numbers however. Top counts: (42) 7/31 Assunpink WMA, MON [CW, PW]; (26) 8/25 Sandy Hook [SH4JC]. None found after 11/1 (1) Sandy Hook [FW, DB].

"White Admiral" Eleven reports from seven sites in Sussex and Morris counties. Noted between 5/23 Whittingham WMA, SUS [WW, SW] and 8/24 Fredon Twp., SUS [SW, WW]. All sightings were of single butterflies.

"Red-spotted Purple" Not as common as in 2003, especially in central NJ. Initially found 5/15 (2) Assunpink WMA, MON [PW, CW]. Top counts of first brood: (75+) 6/8 Walpack Twp., SUS [HB, AB, TH, et al.]; (13) 5/25 Big Brook Park, MON [KK]. Second brood far less evident. Peak count just (7) 7/31 Assunpink WMA [CW, PW]. Last reported 10/5 (1) Neshanic Station, SOM [MP].

Viceroy Widely reported and in good numbers. First observed 5/15 at both Assunpink WMA, MON (2) [CW, PW], and Hatfield Swamp, ESS (1) [KD]. These tie the earliest-ever date. Highest spring tally (6) 5/22 Hatfield Swamp [KD]. Summer top counts higher: (14) 8/4 AT lands, Vernon, SUS [VC]; (8) 7/10 Wallkill River NWR, SUS [WR4JC]. Last noted 9/26 (2) KVSP, SUS [TH].

Hackberry Emperor Very widely reported. First found 6/2 (3) Walpack Twp., SUS [TH], a week earlier than ever. Top first-brood count (11) 6/30 Sandy Hook, MON [SH4JC]. Early brood last found 7/22 (2) AT lands, Vernon, SUS [VC]. Second brood out by 8/4 (4) Montague Twp., SUS [TH, JB, et al.], with peak count of (12) 8/20 Garret Mt., PAS [FP, PP]. Last sighting 10/4 (1) Palisades Interstate Park, BER [VC].

Tawny Emperor About a dozen reports from Monmouth, Bergen, Morris, and Sussex counties. Seen initially 6/7 (1) Palisades Interstate Park, BER [TF], a new early date. Maxima: (a superb 33) 7/1 Montague Twp., SUS [MB, JB]; (7)

6/21 PVT @ Stillwater Road, SUS [TH]. Final observation 8/4 (1) Montague Twp. [JB, TH, et al.]. No reports of a second brood this year.

Northern Pearly-eye Well reported from Sussex, Warren, Morris, and Passaic counties. Initially found 6/13 (1) Troy Meadows, MOR [JS, AB], a new early date by nearly a week. Peak numbers excellent: (24) 7/1 Walpack Twp., SUS [TH, AB]; (22) 7/3 Troy Meadows [GS4JC]; (15+) 6/29 PVT @ Stillwater Road, SUS [FW]. Final sighting 8/21 (1) Walpack Twp. [TH].

Eyed Brown Found at two Sussex County locations. First noted 6/4 (1) AT lands, Vernon [TH], a new early date by more than a week. Top count, also at AT lands, Vernon, (50) 6/21 [JL, CM]. Also found at Wallkill River NWR 6/25 (1) [KW] and 7/10 (1) [WR4JC]. Final sighting 7/22 (4) AT lands, Vernon [VC].

Appalachian Brown Observed in fine numbers from Sussex, Warren, Morris, Essex, Middlesex, and Monmouth counties. A new early date set 5/22 (1) Hatfield Swamp, ESS [KD]. Highest tallies: (46) 7/11 Andover Twp., SUS [S4JC]; (42) 6/12 Assunpink WMA, MON [PW, CW]; (33) 7/10 Wallkill River NWR, SUS [WR4JC]; (23) 7/3 Troy Meadows, MOR [GS4JC]. Last encountered 8/28 (3) Helmetta, MID [NABA] and 8/28 (1) Hatfield Swamp [KD].

Little Wood-Satyr Well reported across northern NJ. First encountered 5/15 (1) White Lake, WAR [TM]. High counts of first brood: (50+) 5/23 Wallkill River NWR, SUS [TH, et al.]; (50+) 5/23 Whittingham WMA, SUS [WW, SW]; (50+) 5/25 Flatbrookville, SUS [TH]. Spring brood seen as late as 6/27 (1) High Point SP, SUS [TH]. Summer brood as early as 6/13 (1) Troy Meadows, MOR [AB, JS], with peak there (164) 7/3 [GS4JC]. Additional high count (50+) 6/20 Martin Tract, MER [MC4JC]. Last found 8/8 (1) Walpack Twp., SUS [TH].

Common Ringlet Found somewhat more widely than last year; reports received from Sussex, Warren, Morris, Passaic, and Essex counties. Spring brood noted from 5/12 (1) Wallkill River NWR, SUS [TH] to 6/16 (1) Frankford Twp. SUS [TH]. High counts of first brood excellent: (60+) 5/23 Wallkill River NWR [JC, CM, DB]; (50+) 5/27 High Point SP, SUS [DB, FW]. Summer brood first observed 7/10 (3) Wallkill River NWR [WR4JC]. Top counts (25+) 7/22 & 8/4

AT lands, Vernon, SUS [VC]. Final sighting 9/15 (2) AT lands, Vernon [VC].

Common Wood-Nymph Excellent numbers and widely distributed. First observed 6/15 (1) Sourland Mt., SOM [PM, BM], a new early date. Highest numbers: (500+) 7/8 Schooley's Mt. Park, MOR [VC]; (459) 7/10 Wallkill River NWR, SUS [WR4JC]; (308) 7/3 Great Swamp NWR, MOR [GS4JC]; (299) 7/3 Troy Meadows, MOR [GS4JC]. Several observers commented that the dark inland form seemed more evident this year; these noted from Sussex, Warren, and Morris counties. Noted last 9/15 (1) Walpack Twp., SUS [TH].

Monarch After a second consecutive difficult winter in Mexico, numbers in northern NJ were way down. First reported quite early 5/1 (1) Great Swamp NWR, MOR [MA, et al.]. Only 1s and 2s reported until late June. Few double-digit counts during breeding season: (14) 7/10 Wallkill River NWR, SUS [WR4JC]; (10) 7/22 AT lands, Vernon, SUS [VC]. Migration appeared pathetic, with high count just (14) 10/9 Sandy Hook, MON [SB]. Last sighting 11/1 Sandy Hook [DB, FW].

Queen No sightings this year. Last found in 2003.

Silver-spotted Skipper Widely reported and quite numerous. First discovered 5/2 (1) Big Brook Park, MON [KK, LK]. Highest spring tallies: (36) 6/12 Assunpink WMA, MON [CW, PW]; (25) 6/15 Sourland Mt., SOM [BM, PM]; (20) 6/12 Hilltop Reservation, ESS [KD]. Summer numbers much better: (170) 6/27 Jager Road @ Old Mine Road, SUS [MB, JB]; (170) 7/3 Washington Valley, MOR [GS4JC]; (105) 8/5 Willowwood Arboretum, MOR [TH]. Last seen 9/23 (1) Fredon, SUS [SW, WW].

Long-tailed Skipper Unreported this year following two sightings in 2003.

Hoary Edge Eleven reports from six Sussex and Morris county locations. First seen 5/24 (1) KVSP, SUS [TH]. Most reports just 1s or 2s, but a significant exception was (12) 6/16 Wildcat Ridge WMA, MOR [TM]. Last noted 6/21 (1) Hamburg Mt. WMA, SUS [KW].

Southern Cloudywing First brood noted at three locations: Assunpink WMA, MON 6/12 (3) [CW, PW]; Sourland Mt., SOM 5/29 (1) [PM, BM]; Flatbrook-ville, SUS 6/24 (2) [TH] & 6/27 (6) [JB, MB]. The even scarcer, though probably regular, second brood observed 7/31 (2)

Assunpink WMA [PW, CW] and 8/8 (1) Mounts Mills, MID [JS, CW, PW].

Northern Cloudywing Widely reported, but no counts reached double figures. Initial sighting 5/15 (2) Sourland Mt., SOM [StW]. Top counts: (9) 6/27 AT lands, Vernon, SUS [VC]; (6) 6/8 Flatbrookville, SUS [TH, AB, HB]. Seen last 7/1 (1) Montague Twp., SUS [MB].

Dreamy Duskywing Widely reported, but not in especially good numbers. Initially encountered 5/8 (1) Mountainside Park, MOR [NABA]. Highest counts: (30+) 5/15 Sourland Mt., SOM [StW]; (12) 5/21 Pequannock Watershed, PAS [KW]. Final sighting 6/16 (2) Wildcat Ridge WMA, MOR [TM] tying latest-ever date.

Sleepy Duskywing An excellent six reports from four sites in Hunterdon and Sussex counties. First noted 4/29 (25+, by far the highest count) Milford, HUN [TM]. Also found at High Point SP, SUS 5/1 (1) and 5/27 (1) [TH]; Crater Lake Road, SUS 5/1 (4) [KW] and 5/25 (1) [TH]; Sunrise Mt., SUS 5/13 (1) [TH, KW]. The 5/27 High Point sighting is a new late date by a week.

Juvenal's Duskywing Not very well reported. Initially found 4/24 (3) Assunpink WMA, MON [CW, PW]. Top counts again low: (10) 4/30 Assunpink WMA [PW, CW] and (10) 6/4 Crater Lake Road, SUS [JB, MB]. Last seen 6/13 (1) Montague Twp., SUS [TH].

Horace's Duskywing An excellent year; 15 reports from 13 locations in Sussex, Morris, Essex, Somerset, Middlesex, and Monmouth counties! Initially encountered 6/26 (1) Hilltop Reservation, ESS [KD]. Highest counts: (an excellent 16) 7/31 Assunpink WMA, MON [PW, CW]; (6) 8/8 Mounts Mills, MID [JS, CW, PW]; (5) 8/8 Helmetta, MID [CW, PW, JS]; (5) 8/8 Pigeon Swamp SP, MID [PW, JS, CW]. Final sighting 8/28 (6) Mounts Mills [NABA].

Wild Indigo Duskywing Widely reported, but not in big numbers. Noted initially 4/18 (2) Mountainside Park, MOR [JS, AB], which also held top spring count 4/24 (4) [AB]. Summer maxima: (139) 7/3 Troy Meadows, MOR [GS4JC]; (15) 8/1 Sparta Mt. WMA, SUS [TH]; (15) 9/21 Vernon, SUS [WW, SW]. Seen last 10/8 (1) Somerset, SOM [PW].

Common Checkered-Skipper A bit improved over last year with a dozen

sites in Monmouth, Somerset, Warren, and Sussex counties. Only two spring reports: 5/17 (1) Weldon Brook WMA, SUS [AB] and 5/27 (1) Wantage Twp., SUS [WW, SW]. Summer observations began 7/26 (1) Somerset, SOM [PW]. Top counts all clustered in late August: (11) 8/21 Thompson Park, MON [AB]; (6) 8/28 Neshanic Station, SOM [MP]; (5) 8/22 Somerset [PW]. Last seen 10/23 (1) Thompson Park [AB].

Common Sootywing A few more reports this year; Monmouth, Middlesex, Mercer, Somerset, and Sussex counties produced 19 sightings from 11 locations. First observed 5/15 (7) Assunpink WMA, MON [CW, PW] where highest count occurred 6/27 (9) [PW, CW]. Next-highest total (4) 8/25 Sandy Hook, MON [JB, MB]. Found last 8/28 (2) Mounts Mills, MID [NABA].

Arctic Skipper Just two reports from the High Point SP, SUS colony: 5/27 (1) [TH] and 5/30 (1) [PBe]. The site was not well covered this year.

Swarthy Skipper Found in Morris, Somerset, Middlesex, Mercer, and Monmouth counties. Early brood discovered 5/25 (3) Big Brook Park, MON [KK], where peak count of (50+) found 6/17 [VC]. Last report of first brood 6/30 (5) Sandy Hook, MON [SH4JC]. Later brood noted 7/29 (3) Thompson Park, MON [VC]. Big Brook Park once again produced mammoth numbers in August: (200+) 8/7 [VC]; (1000+) 8/17 [KK, VC]; (200+) 8/22 [JS, TH]. Final sighting 9/10 (1) Sandy Hook, MON [KK].

Least Skipper Numbers up from last year. New early date: 5/21 (1) Verona Park, ESS [KD]. Early brood maxima: (196) 7/3 Troy Meadows, MOR [GS4JC]; (100+) 6/9 AT lands, Vernon, SUS [TH]; (100+) 6/13 Stillwater Twp., SUS [MB, JB]; (100+) 6/20 Martin Tract, MER [MC4JC]; (100) 5/30 Jenny Jump SF, WAR [SW, WW]. Summer brood less numerous. Peak counts: (50+) 8/19 AT lands, Vernon [VC]; (35) 8/8 Pigeon Swamp SP, MID [JS, CW, PW]; (32) 8/11 Pole Farm, MER [SM]. Final sighting 10/12 (1) Somerset, SOM [PW].

European Skipper Earliest ever were (13) 5/25 Big Brook Park, MON [KK]. Maximal counts excellent: (2000+) 6/19 Walpack Twp., SUS [SW, WW]; (1800+) 6/20 Whittingham WMA, SUS [MB, JB]; (700) 6/20 Martin Tract, MER [MC4JC]. Final observation 7/11 (6) Crater Lake Road, SUS [S4JC].

Fiery Skipper A nice influx brought Fiery Skippers to most northern NJ counties. First discovered 7/3 (1) Harding Twp., MOR [GS4JC], a new early date. Not seen again until 8/8 (1) Helmetta, MID [CW, PW, JS]. Top counts: (12) 9/20 & 9/23 Somerset, SOM [PM]; (11) 9/12 Verona Park, ESS [KD]; (8) 10/7 Sandy Hook, MON [SB]. Last seen 10/31 (1) Somerset [PW, CW].

Leonard's Skipper Reported from eight sites in Monmouth, Somerset, Morris, and Sussex counties. Initially encountered 8/20 (1) Schooley's Mt. Park, MOR [VC]. Maximal counts: (5) 9/4 High Point SP, SUS [WW, SW, JB, et al.]; (4) 8/29 Walpack Twp, SUS [SW, WW, TH]. Last observed 9/22 (1) Walpack Twp. [JB].

Cobweb Skipper Just two reports received, both from Mountainside Park, MOR: 4/30 (1) [WW, SW, AB] and 5/8 (2) [NABA]. Let's hope other sites were simply not visited this spring.

Indian Skipper Seven locations noted from Sussex, Morris, and Somerset counties. First was 5/18 (3) Roxbury Twp., MOR [JS, MP, TH]. Top tallies: (15) 5/25 Crater Lake Road, SUS [TH] and (10) 5/29 Swartswood SP, SUS [TH]. Final sighting 6/7 (2) Sparta Mt. WMA, SUS [TH].

Peck's Skipper First encountered 5/15 at three sites: Assunpink WMA, MON (1) [PW, CW]; Black River WMA, MOR (1) [JS]; White Lake, WAR (1) [TM]. Spring brood high numbers: (22) 6/20 Martin Tract, MER [MC4JC]; (19) 6/15 Pole Farm, MER [SM]; (18) 6/8 Stony Brook-Millstone Reserve, MER [SM, FB]. First brood seen through 7/10 (1) Wallkill River NWR, SUS [WR4JC]. Fresh second brood found 7/11 (1) Sparta Twp., SUS [S4JC]. Peak counts: (75) 7/25 Skylands Botanical Gardens. PAS [NABA]; (35) 8/1 Colonial Park, SOM [CW, PW]; (25+) 8/7 Big Brook Park, MON [VC]. Last sighting 10/12 (1) Somerset, SOM [PW].

Tawny-edged Skipper Initially found 5/16 (1) White Lake, WAR [TM]. Sole double-digit count of first brood (13) 6/17 Big Brook Park, MON [VC]. Last seen 7/11 (1) Sparta Twp., SUS [S4JC]. Second brood observed 7/17 (1) Washington, WAR [NABA]. Peak tallies of summer brood: (50) 8/1 Colonial Park, SOM [PW, CW]; (25+) 8/7 Big Brook Park [VC]. Last sighting 10/11 (1) Somerset, SOM [PW].

Crossline Skipper Rather well reported this year. First brood found between 5/29 (1) Black River WMA, MOR [JS] and 8/17 (1) AT lands, Vernon, SUS [TH]. Peak counts: (30+) 7/24 Flatbrookville, SUS [WW, SW]; (7) 6/15 Pole Farm, MER [SM]. Second brood (central NJ only) discovered 8/8 (2) Mounts Mills, MID [JS, CW, PW] while northwestern NJ's only brood still flying. Second brood peak (6) 8/22 Big Brook Park, MON [JS, TH]. Last found 9/25 (1) Somerset, SOM [PW].

Long Dash Reported from eight sites in Morris, Warren, and Sussex counties. Noted first 5/29 (8) Swartswood SP, SUS [SW, WW, TH] and 5/29 (2) Black River WMA, MOR [JS]. High count: (15) 5/30 Allamuchy Twp., WAR [WW, SW]. Last seen 6/13 (1) Sandyston Twp., SUS [TH].

Northern Broken-Dash Reported widely and in somewhat better numbers than last year. First observed 6/12 (6) Assunpink WMA, MON [PW, CW] & 6/12 (3) Pole Farm, MER [JS, FB]. Maxima: (117) 6/20 Pole Farm [MC4JC]; (78) 7/3 Washington Valley, MOR [GS4JC]; (57) 6/20 Martin Tract, MER [MC4JC]. Last seen 10/11 (1) Somerset, SOM [PW], record late by more than a week.

Little Glassywing Widespread and in better numbers than the last few years. First seen 5/31 (1) Pigeon Swamp SP, MID [PM, BM], a new early date by more than a week. Top counts: (304) 6/20 Martin Tract, MER [MC4JC]; (184) 7/3 Washington Valley, MOR [GS4JC]; (115) 6/20 Pole Farm, MER [MC4JC]. Final sighting 7/25 (1) Skylands Botanical Gardens, PAS [NABA].

Sachem Numbers of this southern immigrant still way down compared to the big years of 2001 and 2002. Noted in Morris, Essex, Somerset, Monmouth, and Middlesex counties. First seen 5/29 (1) Assunpink WMA, MON [CW, PW]. Then nothing more for nearly three months until 8/21 (1) Thompson Park, MON [AB]. Peak counts: (8) 9/12 Deep End Gardens, MON [PM, BM, et al.]; (8) 9/12 Verona Park, ESS [KD]; (7) 8/28 Helmetta, MID [NABA]. New late date set 11/1 (1) Somerset, SOM [PM].

Arogos Skipper Only one report of this very local rarity: 7/7 (4) Ironia, MOR [fide TM]. Apparently quite worn at that time; perhaps the futile searches of others were too late in this early year.

Delaware Skipper Reported widely and in excellent numbers. First seen 6/12 (1) Whittingham WMA, SUS [WW. SWI, a new early date by more than a week. Maximal counts: (59) 7/3 Scherman-Hoffman Sanctuary, SOM [GS4JC]: (55) 7/1 Montague Twp., SUS [JB, MB]; (31) 7/10 Wallkill River NWR, SUS [WR4JC]. Heavily-worn, final sighting of normal brood noted 7/31 (1) Black River WMA, MOR [JS]. Fresh individuals reported at Big Brook Park, MON on 8/7 [VC] and 9/1 [KK] are unprecedented and set a new late date by several weeks. Since an earlier brood is unknown at this park, perhaps these individuals represent immigration from a second brood farther south.

Mulberry Wing Reported from Middlesex, Essex, Morris, and Sussex counties. A new early date set 6/27 (2) Helmetta, MID [TJ]. Maxima: (24) 7/11 Sparta Twp., SUS [S4JC]; (22) 7/11 Andover Twp., SUS [S4JC]; (21) 7/3 Troy Meadows, MOR [GS4JC]. Last observed 8/10 (2) High Point SP, SUS [TH].

Hobomok Skipper Well reported. Earliest: 5/15 (10) Sourland Mt., SOM [StW] and 5/15 (1) Black River WMA, MOR [JS]. Highest numbers: (31) 6/2 Walpack Twp., SUS [TH]; (23) 6/12 Whittingham WMA, SUS [WW, SW]. Several other sites also reported double figures. Last found 7/2 (1) Paulinskill WMA, SUS [TS].

Zabulon Skipper Widely reported in average numbers. First encountered 4/30 (2) Milford, HUN [TM], a new early date. Top spring count (10) 5/23 Hilltop Reservation, ESS [KD]. Last sighting of first brood 6/30 (2) Montclair, ESS [AB]. Summer brood seen initially 7/22 (1) AT lands, Vernon, SUS [VC]. Second brood a bit more numerous: (30) 8/17 Big Brook Park, MON [KK]; (15) 8/17 Thompson Park, MON [VC]. Last sighting 9/14 (1) Somerset, SOM [PW].

Broad-winged Skipper Noted in Monmouth, MIddlesex, Essex, Bergen, Morris, and Sussex counties. Should be looked for wherever there is *Phragmites*. Seen first 7/3 (1) Troy Meadows, MOR [GS4JC]. Highest counts: (70) 7/29 Wallkill River NWR, SUS [KW, TH]; (50+) 8/3 DeKorte Park, BER [FW, DB]; (20+) 8/17 Big Brook Park, MON [VC]. Final sighting 9/22 (1) Sandy Hook, MON [VC], a new late date.

Dion Skipper Six sightings from four locations. Initially discovered 6/30 (4)

Whittingham WMA, SUS [TM]. On the 10/11 (1) Somerset, SOM [PW]. All 7/3 GS4JC, Troy Meadows, MOR noted (7), the high count, and Great Swamp NWR, MOR produced (2). Later sightings at Whittingham WMA were 7/17 (3) [WW, SW] and 7/20 (1) [JB]. Most surprising, and latest ever for northern NJ, were (3) seen at Mounts Mills, MID on 8/8 [JS, CW, PW]. These individuals may be more closely aligned with more southerly populations whose timing (somewhat later than those of northwestern NJ) and behavior (more sluggish than those in the north) have led some observers to conjecture that they may be a separate species.

Black Dash Noted in Middlesex, Morris, Passaic, and Sussex counties. First seen on earliest-ever 6/20 (1) at both Helmetta, MID [TJ] and Walpack Twp., SUS [TH]. Numbers excellent: (160) 7/11 Sparta Twp., SUS [S4JC]; (45) 7/11 Andover Twp., SUS [S4JC]; (35) 7/17 Whittingham WMA, SUS [SW, WW]; (30) 7/3 Washington Valley, MOR [GS4JC]. Final observation 8/10 (5) High Point SP, SUS [TH, TS].

Dun Skipper Widespread and rather numerous. Earliest ever was 5/25 (1) Big Brook Park, MON [KK]. Excellent peak counts: (150) 7/25 Skylands Botanical Gardens, PAS [NABA]; (58) 7/3 Washington Valley, MOR [GS4JC]; (46) 6/20 Martin Tract, MER [MC4JC]: (40) 7/2 Crater Lake Road, SUS ISW, WWI. Second brood flying by mid-August in central NJ. Top second brood tally just (7) 8/29 Willowwood Arboretum, MOR [MB, JB]. Last observed 10/3 (1) Somerset, SOM [PW].

Dusted Skipper Noted at seven locations in Sussex, Morris, Middlesex, and Monmouth counties. First seen 5/15 (an excellent 20) Assunpink WMA, MON [CW, PW], tying the early date for the species. It was also the only sighting of more than 1 or 2. Last noted 5/30 (1) High Point SP, SUS [PBe].

Pepper and Salt Skipper Found just twice at the reliable, but poorly visited, High Point SP, SUS site: 5/20 (1) [FD] and 5/27 (1) [TH].

Common Roadside-Skipper Last seen in 2001. The Yard's Creek site remains off limits.

Ocola Skipper While not up to last year's mini-invasion, this rare southern visitor did pop up at seven sites in Sussex. Morris, Somerset. and Monmouth counties. Noted between 8/23 Hampton Twp., SUS [WW, SW] and sightings were of single individuals.

Contributors: The following people contributed sightings for this report. Those with initials in parentheses are cited in the text: M. Alonso, M. Anderson (MA), P. Bacinski (PB), F. Bader (FB), A. Barlow (ABa), S. Barnes (SB), M. Barrett (MB), A. Baytas (AB), P. Belardo (PBe), C. Bernzweig, M. Bisignano (MBi), J. Burgiel (JB), H. Burk (HB), D. Burnside (DB), J. Collins (JC), V. Corsello (VC), K. Dedrick (KD), F. DeLacour (FD), T. Fiore (TF), D. Freiday (DF), J. Glassberg (JG), M. Gochfeld, P. Grannis, L. Groves, T. Halliwell (TH), L. Harding, D. Harrison (DH), R. Harrison (RH), C. Huebner, T. Jawidzik (TJ), A. Jensen, N. Kazanjian (NK), K. Keating (KK), L. Keating (LK), W. Koenig, A. Koster (AK), J. Lampkin (JL), R. Lane, C. Leck, M. Leck, S. Lee, J. Lubchansky, L. Mack (LM), C. Mayhood (CM), T. McBride (TM), S. Mitchell (SM), B. Murray (BM), P. Murray (PM), V. Nixon, L. Peskac, P. Pfeifer (PP), F. Pfeifer (FP), M. Pollock (MP), J. Rottkamp, C. Shafer, D. Slobodin (DS), J. Springer (JS), T. Sudol (TS), D. Traylor (DT), S. Walter (StW), S. Wander (SW), W. Wander (WW), F. Weber (FW), B. White, P. Williams (PW), C. Williams (CW), K. Witkowski (KW), R. Yaros (RY), J. Zamos (JZ).

Other citations: NABA North Jersey field trip (NABA), Great Swamp Fourth of July Count (GS4JC), Mercer County Fourth of July Count (MC4JC), Sandy Hook Fourth of July Count (SH4JC), Springdale Fourth of July Count (S4JC), Wallkill River NWR Fourth of July Count (WR4JC)

Abbreviations: All locations mentioned include the first 3 letters of the county in capital letters unless that location has already been cited for that species. Other abbreviations: AT = Appalachian Trail, KVSP = Kittatinny Valley SP, NWR = National Wildlife Refuge, PVT = Paulinskill Valley Trail, SF = State Forest, SP = State Park, TNC = The Nature Conservancy, WMA = Wildlife Management Area

Milbert's (continued from p. 1)

Spray Farm during the Springdale 4JC on July 11, 2004. Curiously, despite active searching, there were no sightings after July. What happened to the fresh individuals reported at the end of July? Was there no third brood? This is most perplexing because in recent years MT has been seen occasionally in northwestern NJ from September into November.

For those folks who are not familiar with the area, many excellent butterfly observations have been made at Silver Spray Farm since it was opened to the public in 2003. A former horse farm and dude ranch, it is located in the DWGNRA on Mountain Road between Walpack Cemetery and Buttermilk Falls in one of the most scenic areas in New Jersey. The farm consists of very large fields that in 2003 and 2004 were loaded with Common Milkweed, as well as several large patches of nettle. As it happens, nettles are the only known larval foodplant for MT. And unlike Compton Tortoiseshell, which inhabits forests, MT prefers open fields where it likes to nectar on milkweed and thistle. This, in part, explains why there were more observations of MT at Silver Spray Farm in 2004 (8-10 individuals from June 4 to July 11) than at any other location in New Jersey. MT was also found here in 2003, so we are left to wonder if Silver Spray Farm supported a population back in 2001. (Interestingly, no MT sightings were reported in 2002.)

It is worth noting that the National Park Service plans on leasing Silver Spray Farm to someone who will continue to operate it as a horse farm. While this doesn't sound like a bad idea, we are concerned that the new operators will remove patches of nettle (not a good horse food) and will forbid visitations by butterfly enthusiasts. We urge NABA members to notify the **DWGNRA** Superintendent of the importance of this farm to several species of butterflies (more than 100 Meadow Fritillaries were seen here on June 19, 2004) and recommend that some areas be off limits to the horse operation. Persuading the Superintendent to allow public access -well, at least for us butterfliers- is a must. We suggest that NABA-North Jersey take up this effort.

Looking at this situation a little closer, it appears there may be a relationship between MT and locations beginning with W. Therefore, in keeping with the previous invasions at Wallkill and Walpack, we predict that the next invasion will be in Wawayanda SP, or, better yet, in our backyard!

EARLY AND LATE DATES FOR NORTHERN NJ BUTTERFLIES (through the 2004 season)

Pipevine Swallow E = 2 May	tail L = 28 Oct	Juniper Hairstreak E = 9 Apr	L = 14 Sep	Common Buckeye E = 12 Mar	L = 21 Nov	Least Skipper E = 21 May	L = 17 Oct
Black Swallowtail E = 7 Apr	L = 16 Oct	White M Hairstreal E = 28 Apr	k L = 29 Sep	Red-spotted Purple E = 6 May	L = 26 Oct	European Skipper E = 25 May	L = 14 Jul
Eastern Tiger Swa E = 7 Apr	allowtail L = 11 Oct	Gray Hairstreak E = 3 Apr	L = 2 Nov	Viceroy E = 15 May	L = 11 Oct	Fiery Skipper E = 3 Jul	L = 26 Nov
Spicebush Swallo E = 17 Apr	wtail L = 14 Oct	Red-banded Hairsti E = 30 Apr	reak L = 2 Nov	Hackberry Emperor		Leonard's Skipper E = 16 Aug	
Checkered White E = 16 Apr	L = 3 Nov	Eastern Tailed Blue	L = 31 Oct	Tawny Emperor E = 7 Jun	L = 27 Sep	Cobweb Skipper	L = 25 Sep
Cabbage White E = 29 Jan	L = 29 Nov	Spring Azure comp		Northern Pearly-Eye E = 13 Jun	9	E = 24 Apr Indian Skipper	L = 8 Jun
Falcate Orangetip E = 8 Apr	L = 17 Jun	Summer Azure E = uncertain	L = 1 Nov	Eyed Brown	L=4 Sep	E = 6 May Peck's Skipper	L = 30 Jun
Clouded Sulphur E = 25 Feb	L = 6 Dec	Appalachian Azure		E = 4 Jun Appalachian Brown	L = 24 Jul	E = 7 May Tawny-edged Skip	L = 23 Oct
Orange Sulphur		E = 12 May Northern Metalmark		E = 22 May Little Wood-Satyr	L = 14 Sep	E = 14 May Crossline Skipper	L = 14 Oct
E = 7 Mar Cloudless Sulphur		E = 23 Jun American Snout	L = 2 Aug	E = 11 May Common Ringlet	L = 23 Aug	E = 11 May Long Dash	L = 2 Oct
E = 15 May Little Yellow	L = 31 Oct	E = 21 May Variegated Fritillary	L = 21 Oct	E = 11 May Common Wood-Nyr	L = 18 Sep	E = 24 May	L = 5 Jul
E = 27 Jun Harvester	L = 29 Oct	E = 13 May Great Spangled Frit	L = 15 Nov	E = 15 Jun	L = 27 Sep	Northern Broken-D E = 27 May	ash L = 11 Oct
E = 9 Jun American Copper	L=7 Sep	E = 2 Jun	L = 14 Oct	Monarch E = 23 Apr	L = 23 Nov	Little Glassywing E = 11 Jun	L = 18 Aug
E = 4 Apr Bronze Copper	L = 2 Nov	Aphrodite Fritillary E = 19 Jun	L = 27 Sep	Silver-spotted Skippe E = 28 Apr	er L = 13 Oct	Sachem E = 8 May	L = 31 Oct
E = 6 Jun	L=4 Sep	Silver-bordered Frit E = 15 May	L=27 Sep	Long-tailed Skipper E = 24 Aug	L = 8 Oct	Arogos Skipper E = 30 Jun	L=2 Aug
Bog Copper E = 22 Jun	L = 9 Jul	Meadow Fritillary E = 16 Apr	L = 17 Oct	Hoary Edge E = 22 May	L = 21 Jul	Delaware Skipper E = 12 Jun	L = 1 Sep
Coral Hairstreak E = 8 Jun	L=5 Aug	Harris' Checkerspot E = 11 Jun	L = 23 Jun	Southern Cloudywing E = 15 May	L = 31 Aug	Mulberry Wing E = 27 Jun	L = 26 Aug
Acadian Hairstreak E = 29 Jun	L = 12 Jul	Pearl Crescent E = 26 Mar	L = 15 Nov	Northern Cloudywing E = 7 May	J L = 12 Jul	Hobomok Skipper E = 7 May	L = 10 Jul
Edward's Hairstrea E = 15 Jun	k L=2 Aug	Baltimore Checkers E = 4 Jun	oot L=2 Aug	Dreamy Duskywing E = 18 Apr	L = 16 Jun	Zabulon Skipper E = 30 Apr	L = 17 Oct
Banded Hairstreak E = 6 Jun	L = 13 Aug	Question Mark E = 11 Mar	L = 22 Nov	Sleepy Duskywing E = 21 Apr	L = 27 May	Broad-winged Skipp E = 30 Jun	er L = 22 Sep
Hickory Hairstreak E = 18 Jun	L=2 Aug	Eastern Comma E = 21 Feb	L = 27 Nov	Juvenal's Duskywing E = 8 Apr	L = 28 Jun	Dion Skipper E = 20 Jun	L=8 Aug
Striped Hairstreak E = 16 Jun	L = 14 Aug	Compton Tortoisesho E = 26 Feb	ell L = 18 Nov	Horace's Duskywing E = 9 Jun	L = 29 Sep	Black Dash E = 20 Jun	L = 24 Aug
Oak Hairstreak E = 17 Jun	L = 14 Jul	Mourning Cloak E = 16 Feb	L = 16 Nov	Wild Indigo Duskywin E = 13 Apr	ng L = 23 Oct	Dun Skipper E = 25 May	L=6 Oct
Brown Elfin E = 11 Apr	L=7 Jun	Milbert's Tortoiseshe E = 1 May	ell L = 21 Nov	Common Checkered- E = 24 Apr	-Skipper L = 13 Nov	Dusted Skipper E = 15 May	L= 15 Jun
Frosted Elfin E = 28 Apr	L = 21 May	American Lady E = 3 Apr	L = 21 Nov	Common Sootywing	L = 9 Sep	Pepper and Salt Skip E = 19 May	
Henry's Elfin E = 7 Apr	L = 16 May	Painted Lady E = 9 Apr	L = 22 Dec	Arctic Skipper	L = 21 Jun	Common Roadside-	Skipper
Eastern Pine Elfin E = 29 Apr	L = 8 Jun	Red Admiral	L = 22 Nov	Swarthy Skipper	L=21 Sep	Ocola Skipper E = 15 Aug	L = 1 Aug L = 22 Oct
							22 001

4th of July Butterfly Counts - 2004

Autorian and Anna and an and	LAKEHURST (6/19)	MERCER CO. (6/20)	atterny C			
Black Swallowtail	EARLETONST (0/18)	42	SANDY HOOK (6/30) 5			SPRINGDALE (7/11)
Eastern Tiger Swallowtail	3	30	3	13	115	66
Spicebush Swallowtail	29	8	1	20	5	66
Cabbage White	19	1801		5	9	45
Clouded Sulphur	3		212	389	270	634
Orange Sulphur		150	3	43	165	101
Little Yellow	96	244	279	334	149	106
						1
American Copper	72	16	47	16	6	111
Bog Copper	58			100000000000000000000000000000000000000		
Coral Hairstreak	13	7	21		1	4
Edwards' Hairstreak		Carlo Service de Service				
Banded Hairstreak	37	17		48	70	1
Hickory Hairstreak				3	78	94
Striped Hairstreak	8	2			1	2
Oak Hairstreak	1			4	The second secon	2
Juniper Hairstreak						
White M Hairstreak					1	10
				1		
Gray Hairstreak	9	1	4	The second second		Intitle Incomplished To
Red-banded Hairstreak	1	13	E-3 (%).F.	The second second		
Eastern Tailed-Blue	93	96	28	115	38	07
"Summer" Azure	6	18	17	10		27
Northern Metalmark		10	17	10	8	23
American Snout			146			31
Variegated Fritillary			146	1234		4
	-		1	4	1	4
Great Spangled Fritillary	2	127		156	22	140
Aphrodite Fritillary			-Ara	SHOP A SOUTH SOUTH		1
Silver-bordered Fritillary		Part bereit speker		100000000000000000000000000000000000000	V No. 10 March 1 March 1	
Meadow Fritillary	Design Control of					1
Pearl Crescent	12	385	20	750		4
Baltimore Checkerspot	12	303	20	756	935	502
Question Mark					5	23
Eastern Comma		3	7	4	5	4
		4	1	6	15	12
Compton Tortoiseshell	The state of the s		A SECTION OF SECTION			2
Mourning Cloak	1	5	1	3		4
Milbert's Tortoiseshell			1 2 7 2 2 2 2 2 2 2 2 2 2	-		
American Lady	139	21	24	10	3	11
Painted Lady		1	24	13	5	24
Red Admiral				1		
Common Buckeye	45	9	3	35	28	14
	45	1	20	14	4	2
"Red-spotted Purple"	5	5		3	1 - 1 - 1 - 1	19
Viceroy				1	8	11
Hackberry Emperor		1.000	11	E2-5 - 1-25 - 5120	1	- 11
Tawny Emperor	or the order of the		1			- 10
Northern Pearly-Eye			•	0.4		10
Eyed Brown				24	1	41
Appalachian Brown	19				1	
Georgia Satyr	1			54	33	96
Little Wood-Satyr						
0	69	132	3	304	7	29
Common Ringlet					3	4
Common Wood-Nymph	15	75		873	459	491
Monarch	7	2	4	13	14	
Silver-spotted Skipper	33	。 60	23	193		26
Hoary Edge	1	1574 (V. 1574 III)	20	130	4	136
Southern Cloudywing	2					2
Horace's Duskywing	10					
Wild Indigo Duskywing	10			1		1
		2	1	148	7	13
Common Checkered-Skipper						1
Common Sootywing	100 7630	3		To represent the second	1	tribular paradolis
Swarthy Skipper	8		5			
Least Skipper		162	1	262	23	40
European Skipper	1	734				19
Fiery Skipper		101		32	4	6
Dotted Skipper	35			1		
Peck's Skipper	30					
		44		2	1	1
Tawny-edged Skipper	8	8		1	1 - 122 (1200 1200)	1
Crossline Skipper	34	6		8		22
Northern Broken-Dash	1 1	174	8	185	7	
Little Glassywing	21	497		321	18	81
Delaware Skipper	4	3				60
Mulberry Wing	19153			114	31	98
Zabulon Skipper	3			36	1	67
Broad-winged Skipper	3					Name of the second
Dion Skipper				1	2	8
Black Dash				9		
				70	1	272
	-	State of the same of the				212
Two-spotted Skipper	5					
	2	89	2	108	10	001
Two-spotted Skipper Dun Skipper		89	2	108	13	221
Two-spotted Skipper		89	30	108	13	221 59