

THE PEARLY-EYE 2002

Field Reports of the NABA North Jersey Butterfly Club

Volume 2 February 2003

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Overview of the North Jersey 2002 Butterfly Season by Tom Halliwell

The volume of butterfly reports submitted this year increased significantly over 2001, and, importantly, several reporters have become regular contributors, covering their nearby or favorite areas over and over. Geographic coverage of northern New Jersey (defined for The Pearly-Eye as Mercer and Monmouth counties north) was a bit better than last year; good in the northwest, Somerset, and Monmouth, fair in the northeast, and poor in Hunterdon and Mercer. Unfortunately, security concerns following the events of September 11, 2001, led to closure of a few good butterfly locations, most notably Yard's Creek in Warren County.

Many butterfliers characterized the 2002 season as "early and anemic." However, while the former is certainly correct; the latter is only partly so.

Weather appears to have played a major role, at least in the season's earliness. The winter of 2001-2002 was one of the warmest and driest on record. By the end of a record-breaking mid-April heat wave, a remarkable 23 species had already been discovered, compared with just 10 in 2001. All told, 40 species set new northern New Jersey early dates this year! A notably cold, wet period in late April and early May temporarily slowed things down, and dramatically depressed numbers of a few species, e.g., Spring Azure and Falcate Orangetip. But from mid-May onward, heat and drought dominated the weather picture.

Most observers complained that the hot, dry summer was a very poor one for butterflies. As someone said to me in July, "It's really interesting to experience these up and down years, but it's definitely more fun when it's up!" Fourth of July Counts were down and many big, beautiful butterflies were noticeable only by their rarity. Some folks blamed a lack of nectar sources, or low volumes of nectar due to the drought. Others, though, saw plenty of appropriate flowers with plenty of nectaring insects just few butterflies.

In reality, however, this was not an across-the-board crash of Continued on p. 2 (Overview)

Fourth of July Butterfly Counts by Jim Springer

As noted in the "Overview of the 2002 Season" (this page), this year's Fourth of July butterfly counts in northern New Jersey were preceded by a warm and dry winter, an exceptionally warm April, continued above-average heat, and below-average rain. As a result, the number of species seen on all counts was below the 5- and 10-year averages. However, the total number of individual butterflies seen was higher than average on both the Great Swamp and the Springdale counts. The Raritan count had a much lower number of species and individuals than normal, probably because of less-complete coverage this year.

We welcome the opening of the New Jersey Audubon center at Sandy Hook and the newly initiated NABA butterfly count there. For a limited geographical area the numbers were quite good, and both species and numbers will surely increase as the best locations within the count area are ferreted out, and the coverage increases as it normally does following a new count's initial year. A highlight of the new Sandy Hook count was the northern New Jersey record high tally of Coral Hairstreaks (39).

Other interesting highlights from the counts this year include the first Acadian Hairstreaks found on the Springdale count, and a big 100 Northern Metalmarks there as well. Pearl Crescents were well above their average numbers on most counts, matching the strong 1999 totals. Unfortunately, there was no 2002 echo of the record invasion of Milbert's Tortoiseshells and massive numbers of Red Admirals from the 2001 Wallkill River NWR count.

Satyrs were quite abundant on the counts this year, with count records of 80 Northern Pearly-Eyes on the Springdale count & 72 Appalachian Browns on the Great Swamp

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NABA North Jersey 2002 Field Trip Reports

April 27 --- Twenty-five people, led by Chris Williams, met at the Sandy Hook Visitor Center for part 1 of the Elfin Run. The main objects of this field trip were Henry's Elfin and Juniper Hairstreak. It was a cool morning and some in the group questioned if butterflies would be flying, but within a short time we had very good looks at both target species. Ten species were seen for the day, including 21 American Coppers, 17 Henry's Elfins, and 2 Juniper Hairstreaks.

May 4 --- The target butterflies for Part 2 of Elfin Run were Brown Elfin, Hoary Elfin, Frosted Elfin, Eastern Pine Elfin, and Hessel's Hairstreak. It was a beautiful day for a field trip; a clear sky with temperatures in the low 70s. A group of 13 people met at Lucille's in the Pine Barrens of Warren Grove, Ocean County. We then proceeded to the Beaver Dam Road tower site, where we saw 4 Brown Elfins, 25 Hoary Elfins, and 1 Pine Elfin. Other highlights were 15 Sleepy Duskywings and 7 Cobweb Skippers. After about an hour here, the group headed to the Hessel's Hairstreak hot-spot on Route 72 in Chatsworth. Here were 8 Brown Elfins, 2 Pine Elfins, and, yes, 3 Hessel's Hairstreaks. After lunch the group drove north to Assunpink WMA, Monmouth County, in hopes of finding the Frosted Elfin, and thereby making a clean sweep of the Elfins. Of course, other interesting butterflies are here as well; we saw Falcate Orangetip, 10 Red-banded Hairstreaks, about a dozen Dreamy Duskywings, and the record early date for Zabulon Skipper! The first Frosted Elfin was noted on a Pink Lady Slipper (not a bad combination!) but seen by only a few. Just as the group was losing hope, our hard-working leader, Chris Williams, found a second individual, this one seen well by everyone. We finished with an excellent 19 species for the day. The leader declared the Elfin Runs a success and headed home, but not before stopping at a DQ for a celebratory sundae.

May 19 --- Mountainside Park in Pequannock, Morris County was the destination for our third trip. The only trouble with May 19 this year was that it was cold & frosty in the early morning with high temperatures reaching only into the 50s.

The Pearly-Eye 2002 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 (2003) butterfly sightings should be sent to editor Tom Halliwell, 19 Kings Road, Netcong, NJ 07857 (tbhalliwell@worldnet.att.net).

The Club normally meets on the first Tuesday of the month at 7:30 p.m. in the Haggerty Education Center of the Frelinghuysen Arboretum, 53 East Hanover Avenue, Morristown, NJ (but note that the November meeting is the second Tuesday.) 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 2003 are.

President, Ahmet Baytas (baytasa@mail.montclair.edu); Vice-President, Tom Halliwell (thalliwell@worldnet.att.net); Treasurer, Deedee Burnside (deedeeburnside@aol.com); Secretary, Betty White (bwdayhiker@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.

But the sun striking the south-facing slope brought out the early-season butterflies we wanted to see. The highlights among the 12 species noted were: 3 Little Wood-Satyrs (first of the year), 8 Northern Cloudywings, 8 Cobweb Skippers, 15 Indian Skippers (first of the year), and 7 Dusted Skippers. Thanks go to Jeff Glassberg who was appointed leader-for-aday by the dozen trip participants.

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Overview (continued from p. 1)

butterfly populations. While there were more downs than ups, a good number of butterflies had excellent years.

It was a fine year for many summer-fall immigrants from the south which we typically expect near the coast or in central New Jersey. This year even the northwestern counties hosted multiple Cloudless Sulphurs, American Snouts, Variegated Fritillaries, Common Buckeyes, Fiery Skippers, and Sachems. Long-tailed Skippers probed inland to Sussex and Hunterdon counties, and the five Ocola Skippers flew in Morris, Somerset, Hunterdon, and Essex counties. But where were the Little Yellows?

Swallowtails had a mixed year; the commoner ones did well, especially in late July – early August, but Pipevine reports were down. None of the rarer swallowtails were noted.

Cabbage Whites and the common sulphurs were remarkably early and seemed in better numbers than last year. Five reports of Checkered Whites were encouraging.

Harvesters cooperated repeatedly at two locations, enabling many folks to add them to life lists. However, Bronze Copper is still among the missing. It was a very poor year for the commoner hairstreaks, although there were excellent high counts for Coral, Edwards' and Red-banded. On the positive side, White M Hairstreaks were found at three places. The azures continue to baffle and intrigue.

Metalmarks flew in good numbers at traditional locations. Variegated Fritillary probably bred in Monmouth County, but Great Spangled and Aphrodite Fritillaries seemed down. The reliable colony of Meadow Fritillaries at White Lake got an early start this year and produced four broods instead of the typical three.

Pearl Crescents had a banner year with huge counts on the northern 4JCs, but most of the other True Brush-foots appeared in abysmal numbers. Once again, there were no reports of Harris' Checkerspot. Summer seemed devoid of anglewings, ladies, and Red Admirals - so different from 2001. The emperors, as well, had a below par showing.

Satyrs, on the other hand, did very well. Northern Pearly-Eye, Appalachian Brown, Common Ringlet, and Common Wood-Nymph were all seen in superb numbers.

The post-freeze plight of the Monarch, as expected, produced very small populations. For the most part, even fall migratory flights were unexceptional. (Continued on next page)

Spread-winged Skippers made news this season. This August, apparently for the first time, Southern Cloudywing produced a second brood in northern New Jersey – and, amazingly, in both Morris and Middlesex counties. Also, a new population of Sleepy Duskywing was discovered on the Kittatinny Ridge in early May. And Common Checkered Skipper had a fine year. It sure seemed as if this species survived the winter of 2001-2002 in New Jersey.

Many of our common Grass Skippers had a poor year. Northern Broken Dash, Little Glassywing, Hobomok, Zabulon, and Black Dash were all seen in far lower numbers this year than last. Even Least and Peck's Skippers were not as abundant. But Delaware, Mulberry Wing, and Dun Skippers seemed up from 2001, Fiery Skipper apparently bred in Essex County – and Sachems were everywhere in central New Jersey this summer.

The seasonal recap which follows is only possible because of the cooperation of the members and friends of NABA-North Jersey who send in reports. I would encourage both new and established members and friends to send in regular reports in 2003 to < tbhalliwell@att.net >. Comments on freshness or wear are welcome aids in assessing the timing of populations across northern New Jersey. If you have a favorite place for nature study, send in your species list (with estimated numbers, if possible) every time you go. The more observations we have, even of common butterflies, the better our understanding of the season will become.

Annotated List of Northern New Jersey Butterflies for 2002

compiled by Tom Halliwell

Pipevine Swallowtail A surprising three sightings in early May including 5/2 (1) Lawrence Twp., MER [FB] tying earliest known date. Poorly reported in summer, in part because Palisades lacked regular coverage. Not seen until 7/30 (7, the high count) Englewood Cliffs, BER [DBu], followed by just four additional observations in Sussex and Mercer counties. Two unexpected autumn reports from Monmouth County: 9/29 (1) Sandy Hook [PB] and 10/1 (1) Fort Monmouth [KK], the latter a new late date by two weeks.

Zebra Swallowtall No reports received this year. Last seen in 2000.

Black Swallowtail Not terribly common. Initially found 4/14 (1) Sandy Hook, MON [AB]. Spring peak (6) 6/3 Big Brook Park, MON [KK]. Somewhat more regular in summer. High counts: (33) 7/13 Wallkill River NWR [WR4JC]; (12) 8/4 Stokes Forest, SUS [JZ]. Final sighting 9/22 (1) Sunrise Mt., SUS [WW, SW].

Giant Swallowtail Not seen again this year. Last observed in 2000.

Eastern Tiger Swallowtail First seen 4/7 (1) Milford, HUN [LJ], earliest ever by two weeks. Spring highs: (31 at one puddle) 5/23 Lockwood Gorge, HUN [ABa]; (16) Sourland Mts., SOM [PM, BM]. Less common in June & July, but resurgent from late July through mid-August. Summer peaks: (44) 8/10 Scherman-Hoffman Sanctuary, SOM [TH, CW, et al.]; (38) 8/10 Wallkill River NWR, SUS [WW, SW]; (32) 8/3 Whittingham WMA, SUS [SW, WW]. Last seen 10/6 (1) at both Sunrise Mt.,

SUS [FT] and Frelinghuysen Arboretum, MOR [JG] tying latest date.

Canadian Tiger Swallowtail Not reported this year after first state record in 2001.

Spicebush Swallowtail First report, 4/24 (1) New Brunswick, SOM [PM]. Single-digit counts until July; peak numbers widely reported in August: (16) 8/17 Willowwood Arboretum, MOR [NABA]; (15) 8/10 White Lake, WAR [TM]; (15) 8/27 Big Brook Park, MON [KK]. Final observation 10/6 (1) Sunrise Mt., SUS [FT].

Checkered White An excellent three sites reported: 9/19 (1) Morgan, MID [SB]; 9/24 [KK], 9/29 [PB], & 10/17 [KK] (1) Sandy Hook, MON; and 9/25 (1) Hartshorne Woods, MON [KK]. The 10/17 Sandy Hook report is the latest known.

Cabbage White At least seven reports before previous early date. Earliest: a remarkable 1/29 (1) Little Silver, MON [KK] followed by 2/26 (1) Somerset, SOM [PM]. Spring numbers improved over 2001. Maxima: (108) 4/16 Hartshorne Woods, MON [KK]; (100+) 6/3 Big Brook Park, MON [KK]. Peak summer counts: (233) 7/13 Wallkill River NWR, SUS [WR4JC]; (227) 7/7 Newton Meadows, SUS [S4JC]; (200+) Whittingham WMA, SUS [WW, SW]. Last seen on 11/29 (1) Sandy Hook, MON [CM], a new late date.

Falcate Orangetip Reported only from Monmouth, Morris, and Sussex counties. Initial sighting 4/15 (6) Allaire SP, MON [TT]. Peak numbers somewhat disappointing; high count just (13) 4/17

Mountainside Park, MOR [AB]. Final report 5/29 (1) Wallkill River NWR, SUS [TH].

Clouded Sulphur Numerous record-breaking early reports led by 2/25 (2) Somerset, SOM [MG], a full seven weeks prior to previous early date. Some sightings before mid-April questionable due to confusion with early season Orange Sulphurs with reduced orange. Peak spring count (27) 4/16 Hartshorne Woods, MON [KK]. Summer reports up from last year. High counts: (50+) 6/28 Paulinskill WMA, SUS [TH]; (44) 7/13 Wallkill River NWR, SUS [WR4JC]; (20) 6/23 AT lands, Vernon, SUS [NABA]. Last noted 11/25 (1) Somerset, [PW, CW].

Orange Sulphur First observed 3/7 (2) Somerset, SOM [PW], five weeks earlier than previous record date. Spring counts rather low except in Monmouth County: (50+) 6/3 Big Brook Park, MON [KK]; (42) 4/16 Hartshorne Woods, MON [KK]. Summer maxima higher: (364) 7/6 Troy Meadows, MOR [GS4JC]; (208) 7/13 Wallkill River NWR, SUS [WR4JC]. Final observation 11/20 (13) Big Brook Park, MON [KK].

Cloudless Sulphur A good movement north into our region this year. First noted 8/18 (1) Mounts Mills, MID [JS, CW], a new early date by two weeks. Top counts all at Sandy Hook, MON: (30) 9/4 [KK] & (20) 9/8 [TH]. At least six sightings north of the Piedmont in Sussex and Warren counties. Final sighting 10/21 (1) Sandy Hook [KK], a new late date.

Little Yellow Surprisingly, no reports in 2002. Most recently seen last year.

Harvester Two locations reported for adults, and, at both, gratifyingly cooperative. Initially seen 7/6 (1) Flatbrook-Roy WMA, SUS [ABe, JY], where seen at least five times through 7/15 (1) [FT], with a peak of (3) 7/9 [TH, CH). Found at Scherman-Hoffman Sanctuary, SOM/MOR on 7/17 [MA], with at least eight additional reports through 9/7 (2) [TH, et al.], a new late date. Peak here (6) 7/28 [PW, CW]. Additionally, 44 Harvester caterpillars were feeding on Woolly Aphids at a Pottersville, HUN site on 8/13 [TM]; no return visit could be made to look for adults.

American Copper Not well reported except in Monmouth County. First seen 4/10 (6) Sandy Hook, MON [KK, TH, JZ]. April & May counts low; peak only (31) 4/26 Sandy Hook [BB]. In contrast to 2001, highest numbers occurred in June–early July: (98) 6/27 Sandy Hook [SH4JC]; (65) 6/10 Big Brook Park, MON [KK]; (25) 7/10 Kenvil, MOR [SW, WW]. Last seen 10/20 (3) Big Brook Park [KK].

Bronze Copper Again not seen in northern NJ. Not recorded since 1996.

Bog Copper One report: 6/23 (7) Helmetta, MID [JS], a new early date. This is the same Pine Barrens outlier called Jamesburg in last year's report.

Coral Hairstreak Reported from eight locations, Sussex to Monmouth counties. Initial sighting 6/20 (2) Sandy Hook, MON [KK] where an impressive (39) occurred on 6/27 [SH4JC]. Away from the Hook, peak tally only (5) 7/4 Succasunna, MOR [WW, SW]. Last noted 7/22 (1) Sunrise Mt., SUS [FT].

Acadian Hairstreak Once again reported only from Sparta, SUS, where seen three times 7/5–7/8, with a peak of (3) on the 7/7 S4JC [PW, JS, et al.].

Edwards' Hairstreak Observed at just four locations this year, all in Sussex County. Initial sightings 6/25 from Sunrise Mt. (3) [HB] and Kittatinny Ridge above Mecca Lake (32) [TM], the latter count by far the maximum. Other locations were: Springdale 7/7 (10) [S4JC] and Crater Lake Rd. 7/7 (3) [S4JC]. Final report: 7/22 (1) Sunrise Mt. [FT], tying latest date.

Banded Hairstreak Despite reports

from across northern NJ, numbers were way down for this usually very common butterfly. First noted 6/16 (1) Branchburg, SOM [MP]. Peak count just (13) 7/6 Troy Meadows, MOR [GS4JC], the only count in double-figures. Last observed 7/30 (1) Whittingham WMA, SUS [TM].

Hickory Hairstreak A big drop from last year; just single individuals at six locations in Morris, Sussex, Warren, & Hunterdon counties. First noted 7/6 Troy Meadows, MOR [GS4JC]. Final sighting: 7/12 Clinton Twp., HUN [RL].

Striped Hairstreak Very poorly represented this year; just seven reports at seven localities. Initially found 6/23 (3) Helmetta, MID [JS]. High count only (4) 6/27 Sandy Hook, MON [SH4JC]. Last report: 7/11 (1) Pigeon Swamp SP, MID [R4JC].

Oak (Southern) Hairstreak Once again a single report from Sussex County: this time a very worn individual found dead on a milkweed blossom along Crater Lake Rd., 7/14 [JZ, OW], a record late date by more than a week.

Brown Elfin Only three locations reported this year: Crater Lake Rd., SUS 5/6 (2) [MB, JB] & 5/7 (2) [TH]; Millbrook Gap, WAR 5/8 (3) [DB]; and Allaire SP, MON 5/11 (3) [PB].

Frosted Elfin For the second consecutive year just one report: Assunpink WMA, MON 5/4 (2) [NABA].

Henry's Elfin Sandy Hook, MON provided all reports. Initially found 4/10 (10) [KK, TH, JZ]. High counts: (43) 4/26 [BB] and (29) 4/16 [KK]. Last seen 5/11 (6) [TM].

Eastern Pine Elfin Four sites reported, all in Sussex County. Earliest: 5/4 (2) Thunder Mt. [TH]. Other locations: Sunrise Mt. 5/5 (1) [TH]; Stillwater 5/7 (1) [MB]; and Walpack 5/16 (2) [WW, SW, et al.].

Juniper Hairstreak Reported from Monmouth, Somerset, Hunterdon, and Sussex counties. Initially seen two weeks earlier than ever: 4/9 (2) Sandy Hook, MON [KK], where highest total found 4/16 (33) [KK]. Spring brood not noted after 5/11 (1) Sandy Hook [TM]. Second brood poorly reported. Observed only between 7/4 (1) Somerset, SOM [PW] and 7/20 (1) Walpack, SUS [MB, JB]. Peak count (9)

7/12 Sandy Hook [KK].

White M Hairstreak Three locations noted for this rare and unpredictable species: 5/11 (1) Ramapo Reservation, BER [KW]; 9/25 & 9/29 (1) Hartshorne Woods, MON [KK]; & 9/29 (1) Mahwah, BER [MS, PS]. The 9/29 sightings are new late dates by three weeks.

Gray Hairstreak Not well reported again, although widespread in region. First sighting 4/3 (1) Mountainside Park, MOR [FP], a new early date. High counts: (17) 6/27 Sandy Hook, MON [SH4JC]; (5) 8/18 Mounts Mills, MID [JS, CW]. Last found 10/7 (1) Thompson Park, MON [PB].

Red-banded Hairstreak A good spring with eight reports from five locations in Monmouth, Somerset, and Morris counties. First noted on recordearly 4/30 (1) Assunpink WMA, MON [JB, MB], where (20) on 5/10 [TH] furnished high count. A first-ever at Mountainside Park, MOR on 5/4 [JS] provided only observation north of Piedmont. Spring brood last seen 6/17 (1) Somerset, SOM [PW]. Second brood initially found 8/4 (1) Colonial Park, SOM [CW, PW]; most reports just 1's & 2's. Final sighting 10/20 (1) Somerset [PW].

Eastern Tailed Blue Somewhat better reported than last year. First sighting 4/16 (1) Somerset, SOM [PW]. High spring counts: (40+) 4/24 Mountainside Park, MOR [WW, SW]; (40) 5/11 Lebanon, HUN [JS]. Summer maxima similar: (54) 7/6 Troy Meadows, MOR [GS4JC]; (30+) 8/26 Allendale, BER [DBu]. Final observation 10/20 (1) Hilltop Reservation, ESS [KD].

Spring Azure complex reported in the northern counties. Record-early first sighting 3/15 (1) Ogdensburg, SUS [PG]. Maxima: (25) 4/3 Great Swamp NWR, MOR [HB]; (23) 4/24 Muckshaw Ponds Preserve, SUS [MB, JB]; (21) 4/20 High Point SP, SUS [JB, MB]. Reports mostly petered out by mid-May. However, a very fresh, pale azure found around small, gall-infested Black Cherries at Walpack, SUS 5/16 may have been the "Cherry Gall Azure" type which emerges at this time [WW, SW, et al.]. A few very worn individuals seen through 6/8 High Point SP [NABA] were also probably a Spring Azure type.

"Summer Azure" Initially reported 6/3 (5) Mountainside Park, MOR [AB].

However, conclusive early dates hard to judge since late-emerging, very similar, members of Spring Azure complex can also fly in mid-late May. Even more confusing, it has been theorized by some that in coastal habitats (e.g., Sandy Hook), Summer Azure, not Spring Azure, is present in spring, even as early as mid-April. Counts peaked late June–July: (30+) 7/14 Hatfield Swamp, ESS [KD]; (24) 6/27 Sandy Hook, MON [SH4JC]; (15) 7/6 Troy Meadows, MOR [GS4JC]. Last noted 9/28 (1) Hatfield Swamp, ESS [KD].

Appalachian Azure Six sightings from four locations. Initially found 5/16 (15, the peak count) Sourland Mts., SOM [PM, BM]. Also reported from Mt. Olive, MOR 5/24 (3) [TH], 5/30 (12) [TH, TM], & 6/1 (5) [JB, MB]; Lebanon, HUN 5/26 (6) [JS]; and Culver's Lake, SUS 6/1 (2) [FT].

Northern Metalmark Reported from four locations in Warren and Sussex counties. Initial sightings 6/30 at both White Lake, WAR (12) [TM] and PVT, Stillwater Rd., SUS (17) [JG]. Peak count a huge (70) at PVT site 7/7 [S4JC]. Other locations: Kittatinny Valley SP, SUS 7/7 (3) [S4JC] and Springdale, SUS 7/7 (1) [S4JC]. Last noted 7/17 (2) at PVT site [JZ].

American Snout First noted 6/27 (3) Sandy Hook, MON [SH4JC] and 6/27 (1) Piscataway, MID [CW], record early by more than a week. These reports part of late June–early July flurry which also brought snouts to Sussex and Warren counties. High count (4) 6/28 Paulinskill WMA, SUS [TH]. Four additional sightings in August ending with 8/27 (1) Whittingham WMA, SUS [SW, WW].

Variegated Fritillary Rather widely reported this year, in contrast to last. Seen first 6/8 (1) Sandy Hook, MON [SB], a full month earlier than previous record. High counts: (an excellent 7) 8/18 Mounts Mills, MID [CW, JS]; (3) 9/23 White Lake, WAR [TM]. Final observations: Big Brook Park, MON 11/9 (1) [FB] and 11/15 (2) [KK], latestever by a month. Remarkably, these appeared crisply fresh, possibly indicating uncommon local emergence.

Great Spangled Fritillary First sightings 6/8 at both Stokes Forest, SUS (2) [NABA] and Mounts Mills, MID (2) [TM]. Despite a few excellent counts, observers noted fewer than

2001. High counts: (129) 7/7 Whittingham WMA, SUS [S4JC]; (84) 7/6 Washington Valley, MOR [GS4JC]; (50) 6/23 AT lands, Vernon, SUS [NABA]. Final observation 10/8 (1) Kittatinny Valley SP, SUS [TH].

Aphrodite Three locations reported, all in Sussex County: Walpack 7/7 (3) [S4JC]; Crater Lake Rd. 7/7 (2) [S4JC]; Fredon 8/27 (1) [WW, SW].

Silver-bordered Fritillary Noted at two Middlesex County locations. First found 5/27 (an excellent 40) Helmetta [JS]. Also reported there 6/25 (2) [JG]; 7/11 (5) [R4JC]; and 8/18 (2, the final report) [CW, JS]. Second site: Mounts Mills 8/5 (2) [PW, CW].

Meadow Fritillary Well reported from six counties including a Coastal Plain individual at Assunpink WMA, MON 4/30 [JB, MB]. First sighting 4/17 (2) White Lake, WAR [TM]. Well-watched White Lake population apparently generated four broods this year: 4/17–5/14, 6/8–7/7, 7/19–8/3, and 8/28–9/23 [TM, TH, et al.]. Peak counts: (20) 6/23 AT lands, Vernon, SUS [NABA]; (12) 8/30 White Lake [TH, AB, JZ]; (11) 6/22 Wallkill River NWR, SUS [StW]. Last seen 9/23 (1) White Lake [TM].

Harris' Checkerspot Frustratingly, no reports again! Seen most recently in 2000.

Pearl Crescent Very well reported in excellent numbers. First observation more than three weeks before previous early date: 3/26 (1) Stanton, HUN [CK]. Spring maxima: (26) 5/3 Assunpink WMA, MON [BB]; (20) 5/16 Sourland Mt., SOM [PM, BM]. Summer counts outstanding: (604) 7/13 Wallkill River NWR, SUS [WR4JC]; (401) 7/6 Great Swamp NWR, MOR [GS4JC]; (207) Kittatinny Valley SP, SUS [S4JC]. Last sighting 10/20 (2) Thompson Park, MON [KK].

Northern Crescent No reports. Last found in 1996. Very difficult to identify.

Baltimore Checkerspot Reports received from seven locations in Sussex, Warren, Morris, & Somerset counties. First seen 6/17 (1) Vernon, SUS [AB]. High counts: (40) 6/19 Old Farm Sanctuary, WAR [PM, BM]; (30) 6/23 AT lands, Vernon [NABA]. Last found 7/13 (2) Wallkill River NWR, SUS [WR4JC].

Question Mark Very uncommon this

year. First found 4/4 (1) Sandy Hook, MON [KK], where (5) 4/10 [KK] was peak count for whole year. Away from the Hook, top count just (3) 6/12 Wallkill River NWR, SUS [TH]; all others 1's and 2's. First fresh autumn brood 8/25 (2) Troy Meadows, MOR [JS, CW, PW]. Very few fall reports. Last observed 11/9 (1) Thompson Park, MON [KK], a new late date by three weeks.

Eastern Comma Even less common than Question Mark. First sighting, however, more than two weeks earlier than prior record: 2/21 (1) Kittatinny Valley SP, SUS [ABa]. Peak count for entire year only (4) 5/16 Sourland Mt., SOM [PM, BM]; all others singletons and a few 2's. Indicative of its scarcity, none located on any local Fourth of July Count! First appearance of fresh fall brood 9/6 (1) West Caldwell, ESS [KD]; only a few additional autumn reports. Last seen 11/20 (1) Kittatinny Valley SP [TH], a new late date by nearly a month.

Compton Tortoiseshell A superb spring, followed by a terrible summer. Overwintering adult first sighted more than two weeks earlier than ever: 2/26 (1) Weiss Ecology Center, PAS [KR]. Spring reports from at least a dozen sites in northern counties with high counts of: (10) 3/24 Weiss Ecology Center [PW, CW] and (4) 5/4 Walpack, SUS [WW, SW, et al.]. Disappointingly, only one sighting submitted after early May: 7/9 (1) Walpack [TH]. None at all in fall!

Mourning Cloak Similar to Compton Tortoiseshell seasonal pattern: fine spring, very poor thereafter. Recently emerged hibernators well-reported: first observed 2/16 (1) Garret Mt., PAS [PBo], a new record-early date. Peak numbers: (15) 3/9 Montclair, ESS [AB]; (14) 3/31 Crater Lake Rd., SUS [MB, JB]. After mid-May, sightings scarce: just 16 reports, most of individuals. Last seen 11/9 (1) Bayonet Farm, MON [KK].

Milbert's Tortolseshell No reports this year following the record invasion of the 2001 season.

American Lady An awful year, especially evident in comparison to the superb one in 2001. Record-early 4/3 (1) Sandy Hook, MON [PB] provided an auspicious start, but decent spring numbers never materialized. Spring highs just (8) Mountainside Park, MOR 5/19 [NABA] and 5/25 [JG]. Summer got even worse; from mid-June to season's

end no one could muster more than two American Ladies – and more often than not the total was zero! However, last seen 11/20 (1) Big Brook Park, MON [KK], a latest-ever date by two weeks.

Painted Lady A disappointing five reports this year following last year's excellent showing. Initial sighting six weeks earlier than previous record: 4/9 (1) Sandy Hook, MON [KK]. Others: 4/16 (1) Hartshorne Woods, MON [KK]; 5/25 (1) Mountainside Park, MOR [JG]; 6/22 (1) Hatfield Swamp, ESS [KD]; and 8/16 (1) Thompson Park, MON [KK].

Red Admiral An absolutely dramatic drop-off from last season! While the initial sighting 4/9 (1) Sandy Hook, MON [KK] represents a new early date, most days afield saw no Red Admirals. High counts: (8) 7/13 Wallkill River NWR, SUS [WR4JC]; (7) 7/6 Troy Meadows, MOR [GS4JC]; (5) 7/7 Newton Meadows, SUS [S4JC]. Wallkill's high count above is 1639 fewer than last year! Last found 9/30 (1) Winfield, UNI [PP].

Common Buckeye A nice flight brought buckeyes north by 6/8 (1) Hartshorne Woods, MON [KK]. Most remained in southern portion of region, but several made it as far as Sussex County. Maxima: (an excellent 125+) 8/18 Mounts Mills, MID [CW, JS]; (40+) 8/21 Sandy Hook, MON [AB]. Final sighting 11/20 (5) Big Brook Park, MON [KK], latest-ever by more than a month.

"White Admiral" Four reports from Sussex County: 6/23 (1) AT lands, Vernon, [NABA]; 6/26 (2) High Point SP [CM]; 7/24 (1) Culver's Lake, [FT]; and 8/13 (1) Thunder Mt. [AB, JZ, TH].

"Red-spotted Purple" Reported across the region, though not as evident as last year. First seen 5/22 (2) Marksboro, WAR [MB]. High counts: (30+) 6/26 High Point SP, SUS [CM]; (11) 6/25 Sandyston Twp., SUS [TM]. First & second broods not easily separable; fresh individuals rather continuous into late August. Last noted 10/7 (1) Bayonet Farm, MON [PB].

Viceroy Recorded from Monmouth to Sussex counties, but locally distributed. Initially found 5/27 (3) Pigeon Swamp SP, MID [JS]. That report plus (3) 6/1 Lafayette, SUS [WW, SW] represent highest spring counts. Summer brood maxima: (7) 7/13 Wallkill River NWR, SUS [WR4JC]; (5) 8/27 Big Brook Park, MON [KK]. Several reports of third brood from late September on. Last seen 10/6 (1) Sparta, SUS [TM].

Hackberry Emperor Fewer reports and lower numbers this year. First sightings 6/9 (1) Liberty Twp., WAR [SW, WW] and 6/9 (7, first brood high count) AT lands, Vernon, SUS [KW]. These tie the earliest-ever date. First brood last noted 7/5 (1) Southtown, WAR [WW, CW, et al.]. Second brood seen 8/2 (1) Andover, SUS [JZ], with peak counts (7) 9/6 Sandy Hook, MON [KK] and (5) 8/25 Thompson Park, MON [KK]. Last seen 9/10 (1) Andover Twp., SUS [JZ, TH].

Tawny Emperor Much diminished from 2001; reported from just seven sites in Sussex and Monmouth counties. First observation on recordearly 6/11 (1) Whittingham WMA, SUS [WW, SW]. Multiple counts only at Sandy Hook, MON: 6/27 (2) [SH4JC] and 8/19 (3) [KK]. Last sighting 9/24 (1) Sandy Hook [KK].

Northern Pearly-Eye A fine year; numerous reports from Sussex, Morris, and Warren counties. Found initially 6/23 (1) AT lands, Vernon, SUS [NABA]. Excellent peak numbers: (40) 7/7 Whittingham WMA, SUS [S4JC]; (24) 7/7 Walpack, SUS [S4JC]; (16) 7/6 Troy Meadows, MOR [GS4JC]. Final observation 8/28 (1) White Lake, WAR [TH].

Eyed Brown Found at three Sussex County locations this year. Earliest: 6/22 (1) Lafayette [WW, SW]. Highest count (100+) 6/23 AT lands, Vernon [NABA], where seen on several other occasions. No other locations reached double figures. Third location: Hardyston Twp. 7/16 (2) [TH, JB]. Last observed 7/18 (1) AT lands, Vernon [JZ].

Appalachian Brown Found in good numbers across the region. First reported 5/27 (1) White Lake, WAR [MB], a week earlier than previous record. Maxima: (50+) 7/5 Southtown, WAR [WW, TH, et al.]; (33) 7/6 Great Swamp NWR, MOR [GS4JC]; (33) 7/6 Troy Meadows, MOR [GS4JC]. Last seen 8/28 (2) Rockaway, MOR [TM].

Little Wood-Satyr Seen initially 5/19 (3) Mountainside Park, MOR [NABA]. High counts: (100+) 6/1 Hilltop

Reservation, ESS [KD]; (50+) 6/1 Walpack, SUS [TH, et al.]. Last sighting of first brood 7/1 (1) Wallkill River NWR, SUS [TH]. Summer brood first observed (while worn spring individuals still flying) 6/23 at both Vernon, SUS (2) [NABA] and Helmetta, MID (2) [JS]. Peak second-brood numbers: (78) 7/6 Troy Meadows, MOR [GS4JC]; (70) 7/6 Great Swamp NWR, MOR [GS4JC]. Final report 8/8 (1) Wantage, SUS [WW, SW].

Common Ringlet Another excellent year in Sussex, Morris, and Warren counties; however, no reports south of the Highlands. First sighting 5/11 (1) Lafayette, SUS [SW, WW] nearly two weeks prior to previous early date. Top counts of first brood: (27) 5/27 Wallkill River NWR, SUS [KW]; (12) 6/8 High Point SP, SUS [NABA]. Spring brood last found 6/22 (1) Kittatinny Valley SP, SUS [TH]. Second brood discovered 7/17 (1) PVT, Stillwater Rd., SUS [JZ], with maximal count (21) 8/7 Stokes Forest, SUS [TH, JZ]. Last seen 9/18 (1) White Lake, WAR [TH, et al.], a new late date by three weeks.

Common Wood-Nymph Very well reported in excellent numbers. Recordearly by a week was 6/16 (1) Willowwood Arboretum, MOR [JS]. Peak counts: (479) 7/6 Great Swamp NWR, MOR [GS4JC]; (306) 7/7 Whittingham WMA, SUS [S4JC]; (249) 7/6 Washington Valley, MOR [GS4JC]; (220) 7/13 Wallkill River NWR, SUS [WR4JC]. Final sighting 9/19 (1) White Lake, WAR [MB].

Monarch Very poor numbers following tragic winter die-off in Mexico. First noted 5/11 (1) Jefferson Twp., MOR [TM], but only six others reported before July. From July to early September, generally found in 1's and 2's, or not at all. Only one count reached double-figures prior to fall migration: (13) 7/13 Wallkill River NWR, SUS [WR4JC]. Migration counts down as well with one exception: (400+) 9/19 Linden, UNI [DG]. Other top counts: (113) 9/19 Montclair, ESS [EG]; (52) 10/5 Sunrise Mt., SUS [FT]. Last seen 10/22 (2) Sandy Hook [KK].

Queen Not seen in 2002 following the surprise first state sighting last year.

Silver-spotted Skipper First reported 4/30 at both Assunpink WMA, MON (3) [MB, JB] and Somerset, SOM (1) [PW]. Peak-population reached in July and August: (63) 8/16 Thompson

Park, MON [KK]; (60) 8/17 Willowwood Arboretum, MOR [NABA]; (50+) 8/5 Eagle Island, HUN [RD]. Final observation 10/5 (2) Frelinghuysen Arboretum, MOR [JG].

Long-tailed Skipper An excellent four reports of this rare southern immigrant: 9/6 (1) Sandy Hook, MON [WM]; 9/7 (1) Clinton Twp., HUN [RL]; 9/16 (1) Fredon, SUS [WW]; and 10/3 (1) Carteret, MID [DGa].

Hoary Edge Six locations reported in Monmouth, Sussex, Morris, and Passaic counties. First noted on recordearly 5/22 (1) Mountainside Park, MOR [AB] where an excellent (20+) and (20) were counted 6/3 and 6/17 [AB]. No other location reached double-figures. Only Coastal Plain report: 6/29 (1) Big Brook Park, MON [KK]. Last observed on 7/12 at both Mountainside Park (2) [AB] and Skylands Botanical Gardens, PAS (2) [JB, TH].

Southern Cloudywing Three reports this year, all later than the previous late date. First sighting 7/12 (2) Mountainside Park, MOR [AB]. Very surprising and exciting were fresh individuals 8/17 Willowwood Arboretum, MOR [NABA] and 8/18 Mounts Mills, MID [JS, CW], first known records of a second brood in northern New Jersey.

Northern Cloudywing Noted from Morris, Somerset, Sussex, and Warren counties. First seen 5/16 (1) Sourland Mts., SOM [PM, BM]. Double-figure counts all from Mountainside Park, MOR: (18) 5/24 [BB], (15) 5/25 [JG], & (11) 6/3 [AB]. Final report 7/12 (1) [AB], also from Mountainside Park, established a new late date.

Dreamy Duskywing Rather well-reported. Found initially 4/24 (2) Mountainside Park, MOR [SW, WW]. Peak numbers: (50) 5/10 Assunpink WMA, MON [TH]; (30) 5/25 Lebanon, HUN [JS]; (23) 5/16 Oak Ridge, PAS [TM]. Last seen 6/12 (1) Whittingham WMA, SUS [WW, SW].

Sleepy Duskywing Two sightings from Crater Lake Rd., SUS: 5/6 (4) [MB, JB] and 5/7 (2) [TH]. This location is atop Kittatinny Mountain in an area with much Scrub Oak.

Juvenal's Duskywing Widely reported from Monmouth to Sussex counties, but in lower numbers than 2001. First sightings: 4/10 (1) East

Millstone, SOM [PM] and 4/10 (1) Morgan, MID [SB]. Only two reports reached double-figures: (12) 5/8 Whittingham WMA, SUS [TH] and (10) 4/29 Hacklebarney SP, MOR [TH]. Final observation 6/10 (1) Wallkill River NWR, SUS [LP].

Horace's Duskywing Eight reports from Monmouth, Middlesex, Somerset, Morris, & Sussex counties. No sightings of spring brood, however. Found initially 7/6 (3, the high count) Great Swamp NWR, MOR [GS4JC]. Summer brood last seen 8/4 (2) Colonial Park, SOM [CW, PW]. Third brood reported in Monmouth County, from 9/9 (1) Thompson Park, [KK] to 9/29 (1) Hartshorne Woods [KK], a new late date by three weeks.

Wild Indigo Duskywing Not as abundant as last year. Two sightings on 4/17 were earliest: Mountainside Park, MOR (2) [AB] and Whittingham WMA, SUS (1) [TH]. Spring brood peaked at (14) 5/6 Crater Lake Rd., SUS [JB, MB]. Highest counts provided by summer brood: (171) 7/6 Troy Meadows, MOR [GS4JC]; (35) 7/12 Mountainside Park [AB]. Final reports 10/5 (1) at both Kittatinny Valley SP, SUS [TH] and Hilltop Reservation, ESS [KD].

Common Checkered-Skipper Well reported. First sighting 4/24 (1) Somerset, SOM [PW], more than three weeks earlier than previous record. Three reports prior to mid-May, all in places home to individuals last fall, makes for interesting speculation about overwintering, never proven in northern New Jersey. High counts: (11) 7/13 Wallkill River NWR, SUS [WR4JC]; (7) 8/18 Thompson Park, MON [KK]. Last observed 10/5 (1) Somerset [PW].

Common Sootywing Very local, though widely distributed. Spring brood seen initially a week earlier than previous record: 4/30 (1) Assunpink WMA, MON [JB, MB], with high count there 5/3 (3) [BB]. Second brood by 7/6 (3, the top count) Garret Mt., PAS [PBo, JL]. Third brood first found 8/16 (2) Thompson Park, MON [KK], where peak count (5) occurred 8/18 [KK], and new late date noted 9/9 (1) [KK].

Arctic Skipper Only three sightings submitted from well-known High Point SP, SUS colony: 6/1 (4) [FT], 6/8 (6) [NABA], and 6/11 (4) [GS].

Swarthy Skipper Encountered initially 6/8 (1) Willowwood Arboretum, MOR [MB, JB]. High first-brood count (3) 6/9 Pigeon Swamp SP, MID [PW]. A rare individual north of Piedmont appeared 7/7 (1) Flatbrook-Roy WMA, SUS [S4JC]. Last of first brood 7/11 at both Great Swamp NWR, MOR (1) [HB, TH] and Pigeon Swamp SP (1) [R4JC]. Second brood first noted 8/5 (1) Mounts Mills, MID [PW, CW]. Peak counts: (10) 8/18 Mounts Mills [JS, CW]; (7) 8/18 Fairview Farm, SOM [TH]. Last observed 9/12 (1) Fairview Farm [TH], a new late date.

Least Skipper Despite wide-ranging distribution, less abundant than last year. Initially found 5/27 (1) Pigeon Swamp SP, MID [JS]. First brood high counts: (50) 6/23 AT lands, Vernon, SUS [NABA]; (41) 7/6 Troy Meadows, MOR [GS4JC]. Last sighting of first brood 7/13 (2) Wallkill River NWR, SUS [WR4JC]. Second-brood first noted 7/11 (1) Pigeon Swamp SP [R4JC]. Maximal numbers: (60) 8/11 Vernon (WW. SW. TH]; (40) 8/22 Whittingham WMA, SUS [TH]. Latest second brood report 9/22 (1) Paulinskill WMA, SUS [TH]. Reports of 3rd brood by 9/21 (1) Somerset, SOM [PW]. Last seen 10/5 (3) Verona Park, ESS [KD].

European Skipper Initial report: 5/31 (1) Wallkill River NWR, SUS [PB]. Maximal counts: (700+) 6/8 Campgaw Mt., BER [GS]; (350+) 6/23 AT lands, Vernon, SUS [NABA]; (300+) 6/12 Wallkill River NWR [TH]. Last seen 7/11 (2) Pigeon Swamp SP, MID [R4JC].

Fiery Skipper Considerably more evident than in 2001, with reports from Monmouth to Sussex counties. Much more common south and east, however. First sighting 7/6 (1) Sandy Hook, MON [SB], tying earliest date. Highest counts at Verona Park, ESS [KD]: (25+) 10/5; (18) 8/18. Most of 10/5 Fieries very fresh; perhaps offspring of local breeding. Away from Verona, peak was (7) 9/29 Hartshorne Woods, MON [KK]. Last observed 10/20 (1) Thompson Park, MON [KK].

Leonard's Skipper Reported from six locations in Sussex & Morris counties. Discovered 8/22 (1) Fredon, SUS where seen sporadically through 9/14 [SW, WW]. All reports of single individuals except (2) 9/8 Willowwood Arboretum, MOR [AK, LG]. Final sighting 9/14 at

both Sunrise Mt., SUS [WW, OW] and Fredon, SUS [SW, WW].

Cobweb Skipper Three locations noted this year, up from just one in 2001. First seen on record-early date 4/24 (2) Mountainside Park, MOR [WW, SW]. High counts: (10) 5/7 Boonton, MOR [TM]; (8) Mountainside Park 5/19 [NABA] and 5/24 [BB]. Also found at Oak Ridge, PAS 5/16 (1) [TM, DI]. Last observed 5/27 (1) at the Boonton site [TM].

Indian Skipper Seven locations reported in Morris and Sussex counties. Noted initially: 5/19 (15) Mountainside Park, MOR [NABA], where highest count noted 5/25 (20) [JG]. Away from Mountainside Park, highest just (6) 5/28 Lake Denmark, MOR [TH]. Final sighting 6/21 (1) Kittatinny Valley SP, SUS [TH].

Peck's Skipper First brood observed 5/8 (1) Somerset, SOM [PW, MG] through 6/28 (1) Paulinskill WMA, SUS [TH], with a peak count of (20) 6/2 Kittatinny Valley SP, SUS [WW, SW]. More numerous summer brood initially seen 7/10 (1) Cliffside Park, BER [LG]. Maxima: (75+) 8/17 Fairview Farm, SOM [NABA]; (57) 8/4 Colonial Park, SOM [PW, CW]. Second brood last noted 9/18 (1) White Lake, WAR [TH, et al.]. Third brood as early as 9/22 (3) Montclair, ESS [AB]. Last found 10/13 (1) Somerset [PW].

Tawny-edged Skipper Widely reported in good numbers. First sighting 5/14 (1) Somerset, SOM [PW] set new early record by more than a week. First brood high count (8) 6/9 Pigeon Swamp SP, MID [PW]. Last of early brood 7/12 (1) Skylands Botanical Gardens, PAS [JB, TH]. Second brood first seen 7/20 (1) Scherman-Hoffman Sanctuary, SOM [TH, et al.]. Excellent peak numbers: (82) 8/4 Colonial Park, SOM [CW, PW]; (40) 8/17 Fairview Farm, SOM [NABA]. Last recorded 10/2 (1) Somerset [MG, JBr].

Crossline Skipper Rather sketchily reported. Initial observation three weeks earlier than ever before: 5/11 (1) Lebanon, HUN [JS]. No additional sightings until 6/9 (6) Pigeon Swamp SP, MID [PW]. High counts: (11) 7/20 Walpack, SUS [MB, JB]; (8) 7/4 Succasunna, MOR [WW, SW]. Uncommon second brood first noted 8/17 (1) Fairview Farm, SOM [NABA],

followed by 8/18 (4) Mounts Mills, MID [CW, JS], and, surprising so far north, 8/18 (1) Fredon, SUS [SW, WW]. Last observed 8/21 (1) Fairview Farm [MB, JB].

Long Dash Reports submitted from six locations in Sussex, Morris, and Warren counties. First sighting 5/24 (2) Springdale, SUS [TH], record-early by more than a week. High count only (5) 6/8 High Point SP, SUS [NABA]. Last seen 6/18 (3) High Point SP [TH].

Northern Broken-Dash Reported in relatively poor numbers. First seen 6/17 (1) Somerset, SOM [PW]. Peak numbers: (40) 7/12 Mountainside Park, MOR [AB]; (35) 7/6 Great Swamp NWR, MOR [GS4JC]; (35) 7/6 Washington Valley, MOR [GS4JC]. First brood last noted 8/7 (1) High Point SP, SUS [TH, JZ]. A few sightings in late September, culminating in new late date 9/30 (1) Somerset [MG, JBr, PW], probably represent an additional brood in central NJ.

Little Glassywing Numbers way down from last year. Record-early first report: 6/11 (1) Thompson Park, MON [KK]. High counts: (69) 7/6 Washington Valley, MOR [GS4JC]; (61) 7/6 Troy Meadows, MOR [GS4JC]. Regular brood last found 7/27 (1) Walpack, SUS [NABA]. Final individual, tying latest-ever date, 8/18 (1) Helmetta, MID [JS, CW], indicative of probable partial second brood in central NJ.

Sachem A superb year, with good numbers seemingly blanketing southern and eastern portions of the region. Initial sighting a staggering two months earlier than ever before: 5/8 (1) Somerset, SOM [PW], leading to suspicions, as yet unproven, of overwintering. Only a few additional reports until July, when big influx began, no doubt supplemented by local breeding. High counts: (309) 9/3 Somerset [PW, MG]; (100+) 8/27 Big Brook Park, MON [KK]; (52) 8/4 Colonial Park, SOM [CW, PW]. Also, several reports from the Highlands and Ridge & Valley sections. Seen last 10/22 (2) Somerset [PW].

Arogos Skipper Many fewer than in 2001, with five reports from two Morris County sites. First seen on new early date 6/30 (1) Ironia [JG], where high count of (6) tallied 7/4 [WW, SW]. A

Kenvil location provided sightings on 7/4 (3) [AB]; 7/10 (1) [WW, SW]; & 7/11 (1) [TH, HB].

Delaware Skipper Well represented in northern counties. Found 6/23 (1) AT lands, Vernon, SUS [NABA] to tie earliest-ever date. Peak numbers: (58) 7/10 Kenvil, MOR [SW, WW]; (30) 7/19 Flatbrookville, SUS [TH, ABa]; (23) 7/6 Scherman-Hoffman Sanctuary, SOM [GS4JC]. Latest observation 7/27 (4) Walpack, SUS [NABA].

Mulberry Wing Noted from Sussex, Warren, Morris, and Middlesex counties. First seen on record-early 6/29 (1) Great Swamp NWR, MOR [LZ, MO]. Excellent peak counts: (58) 7/16 High Point SP, SUS [TH, JB]; (33) 7/6 Troy Meadows, MOR [GS4JC]; (28) 7/6 Great Swamp NWR [GS4JC]. Final observation 8/7 (2) High Point SP [JZ, TH].

Hobomok Skipper Widely noted, but not in big numbers. First encountered on new early date: 5/7 (1) Stillwater, SUS [MB]. Only three reports reached double-figures: (25+) 6/8 High Point SP, SUS [NABA]; (15) 6/1 and (12+) 6/2 Walpack, SUS [TH, WW, SW]. Last sightings: 7/6 (1) Troy Meadows, MOR and 7/6 (1) Washington Valley, MOR [both GS4JC].

Zabulon Skipper First brood poorly reported. Initial sighting 5/4 (1) Assunpink WMA, MON [NABA], a new early date. Peak first-brood count (7) 6/3 Raritan Confluence SP, SOM [RD]. Last of spring brood 6/27 (1) Sandy Hook, MON [SH4JC]. Second brood considerably more widespread; first seen 7/31 (1) Thompson Park, MON [PB], with high count of (30+) 8/17 Fairview Farm, SOM [NABA]. Last noted 9/29 (1) Hartshorne Woods, MON [KK].

Broad-winged Skipper Reported from eight locations around the region. Found initially 7/7 (1) DeKorte Park, BER [KD] where highest total of (200+) counted 8/3 [KW]. Away from DeKorte, peak count (18) 8/16 Thompson Park, MON [KK]. Final report 8/19 (3) Sandy Hook, MON [KK].

Dion Skipper Good numbers reported from six locations in Sussex, Warren, & Morris counties – but only in first week of July. First seen 7/1 (1) Troy Meadows, MOR [JG]. Maxima: (16) 7/6 Great Swamp NWR, MOR [GS4JC]; (10)

7/5 Whittingham WMA, SUS [WW, CW, et al.]; (9) 7/5 Southtown, WAR [JS, JB, et al.]. Last noted 7/7 (7) at three locations on the S4JC.

Black Dash Somewhat less plentiful than last year. First reported 6/23 (1) Helmetta, MID [JS], a new early date. High counts: (35) 7/6 Washington Valley, MOR [GS4JC]; (32) 7/6 Great Swamp NWR, MOR [GS4JC]; (15) 7/5 Whittingham WMA, SUS [CW, WW, et al.]. Last seen 7/27 (2) Walpack, SUS [NABA].

Dun Skipper Widely reported in good numbers. First sighting 6/1 (1) Warren, SOM [JS]. Few additional reports until July. Northwest NJ had top numbers: (114) 7/16 High Point SP, SUS [JB, TH]; (84) 7/27 Walpack, SUS [NABA]; (75) 7/19 Flatbrookville, SUS [TH, ABa]. Final worn first-brood individual noted 8/19 (1) Kittatinny Valley SP, SUS [TH], overlapping first of new brood farther south: 8/10 (1) Scherman-Hoffman Sanctuary, SOM [TH, et al.]. Last seen 10/2 (1) Somerset, SOM [MG, JBr].

Dusted Skipper Eight reports from Sussex, Passaic, Morris, and Middlesex counties. Initially found 5/16 (1) Oak Ridge, PAS [TM, DI]. Peak numbers at Mountainside Park, MOR quite good; e.g., (20) 5/25 [JG]. Otherwise just 1's and 2's. Final sightings 6/8 (1) from Stokes Forest, SUS [NABA] and Mounts Mills, MID [TM], the latter the only report south of Highlands.

Pepper and Salt Skipper Noted just twice at High Point SP, SUS colony: 6/1 (1) [FT] and 6/8 (35, an excellent count) [NABA].

Common Roadside-Skipper No reports. The Yard's Creek colony was not accessible this year due to security closure.

Ocola Skipper An excellent five locations reported: 8/17 (1) Fairview Farm, SOM [NABA]; 9/10 (1) Clinton Twp., HUN [RL]; 9/21 (1) Hilltop Reservation, ESS [KD]; 10/5 (1) Verona Park, ESS [KD]; and 10/5 &10/6 (1) Frelinghuysen Arboretum, MOR [JG], this latter date the latest ever. Ocola now appears somewhere in the region nearly every year.

<u>Contributors</u>: The following people contributed sightings for this report. Those with initials in parentheses are cited in the text.

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Other citations:

NABA North Jersey Butterfly Club field trip (NABA), Great Swamp Fourth of July Count (GS4JC), Raritan Fourth of July Count (R4JC), 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, NWR = National Wildlife Refuge, PVT = Paulinskill Valley Trail, SP = State Park, WMA = Wildlife Management Area

Field Trips (continued from p. 2)

June 8 --- This different kind of field trip (one major aim was to find the <u>nocturnal</u> caterpillar of Edwards' Hairstreak) attracted about 19 people who met at the High Point SP office at 2:00 in the afternoon. Wade & Sharon Wander then led a carpool to the Sawmill Road section of the park where the group found such goodies as Common Ringlet (12), Arctic Skipper (6), Long Dash (5), Hobomok Skipper (25), and Pepper-and-Salt Skipper (35), among others. A quick stop at the Sawmill Road-

Deckertown Turnpike junction failed to produce any Harris' Checkerspots although the food plant (Flat-topped Aster) is known to be here. Jim Zamos then took folks to another location, Camp Olympia, in Stokes State Forest. where Spring and Summer Azures, more Ringlets and Long Dashes, plus Least and Zabulon skippers were added to the list. The group then temporarily adjourned, under Marge Barrett's direction, to Delmonico's Sunset Grill. where we were joined by Jeff Glassberg and Jane Scott. After dinner, and with daylight fading, Jeff Glassberg and Jim Springer led our now somewhat smaller group to Sunrise Mountain where we hoped to find the larva of Edward's Hairstreak. After a nervous 30 minutes awaiting darkness, eagle-eved Paula Williams found the caterpillar on a very short Scrub Oak. The remaining faithful saw the larva being attended by many small ants. In addition to the trip leaders. special "thank-yous" to Marge, for making dinner reservations, and to Paula for finding the larva.

June 23 --- An enthusiastic group of 25 members and friends met on a hot, humid day for the annual trip to Canal Road in Vernon. Under the leadership of Wade and Sharon Wander, 34 species were tallied in the fields, marshes, and woods in the vicinity of the Appalachian Trail. Highlights included: Coral and Gray Hairstreaks (disappointingly, no other hairstreaks were seen), 20 Meadow

(Continued on p. 11)

Early and Late Dates

The chart of "Early and Late Dates for Northern NJ Butterflies" which appears on the next page has been developed in consultation with many of northern New Jersey's active butterfliers. Additional information was culled from back issues of The Mulberry Wing which was published by the NYC Butterfly Club through much of the 1990s.

Many rare species, with few records, are not listed in the chart. Also, note that the late date for Spring Azure and early date for Summer Azure are not given. This is due to the difficulty in visually separating Summer Azure from some of the taxa in the Spring Azure Complex.

The dates shown are, of course, not the final word. Our data has been generated only in the past 15 years or so, and most of it quite recently. We have certainly not experienced all the cyclical (or not) variations in butterfly populations that make butterflying so interesting. So keep your eyes open, keep the chart handy, and send in 2003 updates for next year's Pearly-Eye.

EARLY AND LATE DATES FOR NORTHERN NJ BUTTERFLIES

(through the 2002 season; future changes will be reported in The Pearly-Eye)

Pipevine Swallowtail E = 2 May L = 1	Juniper Hairstreak Oct E = 9 Apr	L=14 Sep	Common Buckeye E = 12 Mar	L = 20 Nov	Least Skipper E = 23 May	L = 17 Oct
Black Swallowtail E = 7 Apr L = 1	White M Hairstrea 6 Oct E = 28 Apr	L=29 Sep	Red-spotted Purple E = 6 May	L = 24 Oct	European Skipper E = 30 May	L = 14 Jul
Eastern Tiger Swallowtail E = 7 Apr L = 6	Gray Hairstreak 6 Oct E = 3 Apr	L = 23 Oct	Viceroy E = 15 May	L = 11 Oct	Fiery Skipper E = 6 Jul	L = 26 Nov
Spicebush Swallowtail E = 18 Apr L = 1	Red-banded Hairs 4 Oct E = 30 Apr	streak L = 2 Nov	Hackberry Emperor E = 9 Jun	L = 10 Oct	Leonard's Skipper E = 16 Aug	L=22 Sep
Checkered White E = 24 Jul L = 1	Eastern Tailed Blu 7 Oct E = 1 Apr	ie L=31 Oct	Tawny Emperor E = 11 Jun	L=27 Sep	Cobweb Skipper E = 24 Apr	L=2 Jun
Cabbage White E = 29 Jan L = 2	Spring Azure com	plex L=uncertain	Northern Pearly-Eye E = 19 Jun	L=4Sep	Indian Skipper E = 6 May	L = 24 Jun
Falcate Orangetip	Summer Azure 1 Jun E = uncertain	L = 4 Oct	Eyed Brown E = 14 Jun	L = 24 Jul	Peck's Skipper E = 7 May	L = 23 Oct
Clouded Sulphur	Appalachian Azure	e L=4Jun	Appalachian Brown E = 27 May	L=6 Sep	Tawny-edged Skippe E = 14 May	er L = 14 Oct
Orange Sulphur	Northern Metalma	ark L = 22 Jul	Little Wood-Satyr E = 11 May	L=23 Aug	Crossline Skipper E = 11 May	L=2Oct
Cloudless Sulphur	American Snout 21 Oct E = 27 Jun	L=21 Oct	Common Ringlet E = 11 May	L=18 Sep	Long Dash E = 24 May	L=1 Jul
Little Yellow	Variegated Fritilla 29 Oct E = 8 Jun		Common Wood-Nyr		Northern Broken Da E = 27 May	sh L=30 Sep
Harvester	Great Spangled F		Monarch E = 23 Apr	L = 10 Nov	Little Glassywing E = 11 Jun	L=18 Aug
American Copper	Aphrodite Fritillar 22 Oct E = 20 Jun		Silver-spotted Skipp E = 28 Apr	_	Sachem E = 8 May	L = 29 Oct
Bronze Copper	Silver-bordered F	Fritillary	Long-tailed Skipper		Arogos Skipper	L = 23 Jul
E = 6 Jun $L = 6$	4 Sep E = 15 May	L=3 Sep	E=24 Aug	L=8 Oct	E = 30 Jun	L=23 Jul
Bog Copper E = 23 Jun L =	Meadow Fritillary 9 Jul E = 16 Apr	L = 17 Oct	Hoary Edge E = 22 May	L = 21 Jul	Delaware Skipper E = 23 Jun	L=1 Aug
Coral Hairstreak E = 8 Jun L =	Harris' Checkers 1 Aug E = 8 Jun	pot L = 23 Jun	Southern Cloudywin E = 15 May	g L = 18 Aug	Mulberry Wing E = 29 Jun	L=12 Aug
Acadian Hairstreak E = 29 Jun L =	Pearl Crescent 8 Jul E = 26 Mar	L=2 Nov	Northern Cloudywin E = 7 May	L = 12 Jul	Hobornok Skipper E = 7 May	L=10 Jul
Edward's Hairstreak E = 20 Jun L =	Baltimore Check 22 Jul E = 10 Jun	erspot L = 20 Jul	Dreamy Duskywing E = 18 Apr	L = 16 Jun	Zabulon Skipper E = 4 May	L = 17 Oct
Banded Hairstreak E = 13 Jun L=	Question Mark 10 Aug E = 11 Mar	L=9 Nov	Sleepy Duskywing E = 21 Apr	L = 13 May	Broad-winged Skip E = 30 Jun	per L=17 Sep
Hickory Hairstreak E = 21 Jun L=	Eastern Comma 2 Aug E = 21 Feb	L = 20 Nov	Juvenal's Duskywin E = 8 Apr	L=20 Jun	Dion Skipper E = 20 Jun	L = 15 Jul
Striped Hairstreak E = 16 Jun L =	Compton Tortois 17 Jul E = 26 Feb	seshell L = 18 Nov	Horace's Duskywin E = 9 Jun	L=29 Sep	Black Dash E = 23 Jun	L=2 Aug
Oak Hairstreak E = 17 Jun L =	Mourning Cloak 14 Jul E = 16 Feb	L = 16 Nov	Wild Indigo Duskyw E = 13 Apr	ving L = 23 Oct	Dun Skipper E = 29 May	L = 6 Oct
Brown Elfin	Milbert's Tortois	eshell L = 12 Oct	Common Checkere E = 24 Apr	ed-Skipper L = 13 Nov	Dusted Skipper E = 15 May	L=12 Jun
Frosted Elfin	American Lady 21 May E = 3 Apr	L = 20 Nov	Common Sootywing E = 30 Apr	g L=9 Sep	Pepper and Salt Sk E = 19 May	ipper L=21 Jun
Henry's Elfin	Painted Lady E = 9 Apr	L=22 Dec	Arctic Skipper E = 20 May	L=21 Jun	Common Roadside E = 14 May	e-Skipper L=1 Aug
Eastern Pine Elfin	Red Admiral E = 9 Apr	L = 15 Nov	Swarthy Skipper E = 22 May	L=12 Sep	Ocola Skipper E = 15 Aug	L = 6 Oct

Field Trips (continued from p. 9)

Fritillaries, 30 Baltimore Checkerspots (these were adults; also noted were larvae, pupae, and a freshly emerged adult), "White Admiral" (zipping around overhead), Northern Pearly Eye (a first of the year), 100 Eyed Browns (also first report for 2002), and a spectacularly fresh Delaware Skipper (tying the earliest northern NJ sighting). The estimated 350 European Skippers sounds huge, but, in fact, is only a third of last year's total. Most observers agreed that the number of individual butterflies was considerably fewer this year.

July 9 --- (Report from Ahmet Baytas who organized this extra-special Regal Fritillary adventure. Thank you Ahmet!) Nine NABA North Jersey members traveled to Fort Indiantown Gap, PA, to participate in an afternoon butterfly walk, hoping to get at least a glimpse of the magnificent Regal Fritillary. Just before three o'clock in the afternoon we arrived at the office of the Nature Conservancy, which sponsors these walks, and were soon joined there by several members of the NYC Butterfly Club as well as a number of other individuals and volunteers. The sky was mostly cloudy and rain was in the forecast for the late afternoon, so we were really nervous. Fortunately, the organizers of the walk kept the introductory talk short and soon we were on our way to the fields. Just over an hour into the walk we felt the first raindrops, but by then all of us had enjoyed great looks at Regal Fritillaries. During the walk, one of the fritillaries landed on a patch of orange milkweed (which clearly was their preferred nectar source) only a yard or two away from us-a moment I will never forget. On the way back, I thought about the decline, particularly in the East, of this truly beautiful, majestic species, which saddened me; but I also was happy about how butterflying had enhanced my enjoyment of the natural world. By the way, we also saw some Great Spangled and smaller numbers of Aphrodite Fritillaries, all three swallowtail species, a few species of skippers, an American Copper, an American Lady, several Common Wood Nymphs and Pearl Crescents, an Eastern Tailed Blue, and a Summer Azure. But sadly, except for one flying high up above the parking lot, we had no Monarchs during the trip.

July 27 --- Another big group of 20 members and friends turned out for our first trip to the Walpack-Hainesville area in Sussex County. On an overcast day that appeared to hold little promise, the group tallied an excellent 29 species. This included superb looks at two Variegated Fritillaries (at two widely separated spots), 5 Meadow Fritillaries, a "rare" American Lady, a lovely fresh Viceroy, 12 Northern Pearly-Eyes, 5 fresh second-brood Common Ringlets, 5 Monarchs, a surprise Common Checkered-Skipper, 8 Crossline Skippers, and a big 100 Dun Skippers. A real bonus were the two Black Bears safely enjoyed from our cars near Buttermilk Falls. Thanks to Wade & Sharon Wander for their typical excellent, enthusiastic leadership.

August 17 --- In the midst of August's heat wave 24 folks took leave of their senses to join Tom Halliwell at Willowwood Arboretum and Fairview Farms. Despite the heat, a fine 27 species were found. The butterfly garden at Fairview Farms (the HQ of the Upper Raritan Watershed Association) was simply overwhelming. In just that small enclosure 20 species were identified and the big numbers of skippers allowed close, comparative study. Trip highlights (combining both

places) were: 2 Red-banded Hairstreaks (finding these is a specialty of Paula), 2 Common Buckeyes, a very fresh Southern Cloudywing (found by Wade at Willowwood, this is the first known north Jersey record of a second brood), a Common Sootywing, 5 Swarthy Skippers, 100+ Peck's Skippers, 60+ Tawny-edged Skippers, a fresh, second-brood Crossline Skipper, 40+ Zabulon Skippers, and, best of all, an Ocola Skipper (a real rarity found by Wade). After lunch, many in the group traveled to Scherman-Hoffman Sanctuary where 4 adult Harvesters were seen flitting in the forest, and two Harvester caterpillars nestled among the wooly aphids.

September 7 & 8 — On the 7th our group of 17 butterfliers met at 9:30 am at Cape May Lighthouse (along with dozens of motorcyclists who were obviously attracted by Cape May's reputation as a nature hotspot). However, the best location for butterflies was at CMBO - Goshen. In their wonderful gardens we saw 26 of the day's 32 species, including Cloudless Sulphur (also at several other locations), Longtailed, Swarthy, Fiery, Aaron's, and Salt Marsh skippers. Ocola Skipper was found here earlier in the day by Doyle Dowdell, but despite having this enthusiastic young butterflier as scout and guide, and scrutinizing seemingly hundreds of Sachems, we ended up Ocolaless. Chris & Paula got us all excited by finding a Hayhurst's Scallopwing near their motel, but when the group went back there and attempted to locate it, all we could find were numerous Common Sootywings. Hmm..... On the morning of the 8th. 13 people met at Cape May Pavilion Circle Gardens, where we saw American Lady, Painted Lady and a Viceroy. Cloudless Sulphurs were again seen widely, and at Jim & Debbie Dowdell's house we saw Red-banded Hairstreak, American Snout, and Fiery Skipper. But again the best location for butterflies was the CMBO - Goshen gardens. Here we saw 24 of the day's 34 species, including Broad-winged Skipper (not seen the previous day). The two-day species total was an excellent 39. A special "thank you" is owed to Diana and Peter for having us to their house for " Asian take-out"; much more fun than sitting in a restaurant! As usual with North Jersey NABA, it was a raucous group; we hope the neighbors didn't get the wrong impression about butterfliers! Thanks also to Jim & Debbie for letting us visit their home garden.

Summary (continued from p. 1)

count. Monarch numbers were universally down on all the counts presumably, because of the previous winter's die-off in Mexico. We hope that a normal winter in Mexico followed by good weather in the U.S. and Canada will restore normal numbers. The record number of 116 Sachems seen on the Raritan count presaged even larger totals later in the summer, especially in the southern counties of our area.

Despite reasonably good Fourth of July count coverage in northern NJ, we encourage people to consider starting new counts. For example, Warren, Hunterdon and Mercer counties have a number of great butterfly areas, but are only peripherally included in existing count circles. One can always begin by covering a more limited area, and then, as momentum grows in subsequent years, expand into a full 15-mile diameter circle. More information on starting a count can be found at < http://www.naba.org/counts.html >.

(See page 12 for a tabular compilation of all counts.)

4th of July Butterfly Counts - 2002

	SANDY HOOK (6/27)	LAKEHURST (6/29)	GREAT SWAMP (7/6)	SPRINGDALE (7/7)	RARITAN (7/11)	WALLKILL NWR (7/13)
Black Swallowtail	1	THE THE SECTION OF TH	3	7	2	22
Eastern Tiger Swallowtail	1	1	22	14	13	33
Spicebush Swallowtail		4	2	29	5	6
Cabbage White	53	56	200	388	228	270
Clouded Sulphur		1	10	24	11	45
Orange Sulphur	44	53	429	189	21	219
Harvester			120	1	21	210
American Copper	98	123	1	13		
Bog Copper		104		10		
Coral Hairstreak	39	30	1	3		
Acadian Hairstreak			The Street of the Street	3		
Edwards' Hairstreak				13		
Banded Hairstreak		17	18	5	1	1
Hickory Hairstreak		"	1	3		
Striped Hairstreak	4	4	2	2	1	100000000000000000000000000000000000000
Gray Hairstreak	17	3	5	-		1
Eastern Tailed Blue	19	91	106	37	1	27
"Summer" Azure	24	50	22	21	1	14
Northern Metalmark	24	50	22	100		14
American Snout	3			1		-
Variegated Fritillary	1					1
Great Spangled Fritillary	1		174	348	3	1 34
Aphrodite Fritillary			1/4		3	
Silver-bordered Fritillary				5	-	the second of the second
Meadow Fritillary				0	5	
Pearl Crescent	w outside OHD (19)	04	754	6		
Baltimore Checkerspot		81	754	346	96	609
	-			21		2
Question Mark	3		1	4	entire donors	doven a no
Mourning Cloak			1	2		
American Lady	1	5		5		1
Red Admiral	1	1	11	11		10
Common Buckeye	3	24	1		2	
"Red-spotted Purple"		1	1	14	1	2
Viceroy				2	1	7
Hackberry Emperor	1		199			
Tawny Emperor	2			1		
Northern Pearly-Eye			16	80		
Appalachian Brown			72	40		
Georgia Satyr		10		NV correct teach		the min section (i)
Little Wood-Satyr	4	179	175	23	5	6
Common Wood-Nymph		128	852	564	2	220
Monarch	2	2	8	14		15
Silver-spotted Skipper	9	4	48	66	9	4
Hoary Edge		6		4		
Southern Cloudywing		5				100000000000000000000000000000000000000
Horace's Duskywing		5	3		1	1
Wild Indigo Duskywing			178	3	44	Test Newscore
Common Checkered Skipper					1	11
Common Sootywing		1				2
Swarthy Skipper	2	14	1	1	1	100 100 100 100
Least Skipper		1	99	33	1	2
European Skipper		IN TOPINGED PART	8	6	2	
Dotted Skipper		2				Least Supers
Peck's Skipper					3	
Tawny-edged Skipper		10	3	2	1	
Crossline Skipper		25	7	16		
Northern Broken Dash	3		96	38	7	2
Little Glassywing		6	176	62		6
Sachem		4	6		116	
Delaware Skipper	Al extremely again	23	49	78	2	15
Mulberry Wing			62	15	12	
Hobomok Skipper			2			
Zabulon Skipper	1					
Dion Skipper		VG Harrist Arts and	19	7		A CONTRACTOR
Black Dash	ry transferontino di	estoso estelemente	74	54	11	1
Two-spotted Skipper		9		road barrens		CONTRACTOR AND ADDRESS OF
Dun Skipper		6	70	141	3	14
TOTAL SPECIES	25	37	43	50	34	32
TOTAL INDIVIDUALS	341	1089	3789	2865	614	1597
			1 0,00	2000		1