

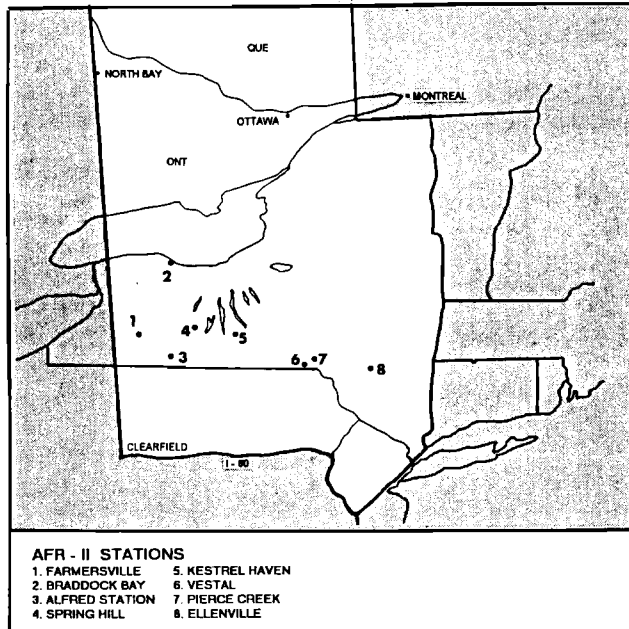
Atlantic Flyway Review: Region II (North Central) - Fall 1995

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This newly constituted region will examine the migratory flow as it crosses a transect of New York State from western New York, through the Finger Lakes and Susquehanna regions, to the Hudson Valley. Currently, Braddock Bay, which reflects the migratory dynamics along the southern shore of Lake Ontario, is the northernmost station. Input from Canadian stations between Ottawa and North Bay, New York, sites in the Adirondacks, Catskills, and Hudson Valley, and Pennsylvania stations north of I-80 would certainly enhance this study.

Several things immediately become apparent in attempting to view migration through the variety of lenses represented by our stations. There is a vast difference in perception/results between migration sampling and constant-effort banding. In fact, the season may have been characterized as minor with only the sampling view. We certainly experienced a region-wide drought, although the perception varies. The regional drought started in December 1994 and continued to the end of 1995 when an annual deficit still existed. As with the geography of this transect, the extent of drought varied widely. Productivity did not appear to be affected as gauged by those studying that area and, if anything, insect populations, albeit different than normal pest species, abounded and provided much food for insect-eating species.

Jan. - Mar.



Integrated Pest Management field scouts were busy both in the field and back in the identification keys this year. Finally, it appears that MAPS protocols cause participating stations to lose valuable migration netting time. Despite all, a migration of gigantic proportions was evidenced and perhaps constrained to a corridor running northwest to southeast through the central Finger Lakes. Comparison with results from both coastal and ridge areas will be most interesting.

Why? The National Weather Service reported aberrant weather systems throughout the period. The polar and arctic branches of the jet stream, which tend to guide and influence weather patterns, were much north of their normal position and the overall flow of weather systems produced many blocking events such as very strong southerly winds and south to north storm tracks. Combined, these elements may well have both slowed and funnelled migration through our study area.

The individual contributions to cooperative research and field ornithology were many and varied. Ellenville was blessed by kinglets, Vestal enjoyed species not seen in many years and a resurgence of numbers, Kestrel Haven documented very early Lincoln's Sparrows which may postulate an extralimital breeding, Alfred Station had better numbers and diversity, and Braddock Bay experienced an awesome thirty days. Each year, someone comes up with something new and this was no exception with this year's honors going to Don Clark for inventing the perfect Osprey lure!

Table 1. AFR II - Summary of Operations 1995

	Farmersville Sta.	Braddock Bay	Alfred Station	Spring Hill
Start	06 AUG	25 JUL	21 JUL	07 AUG
Stop	14 NOV	06 NOV	08 NOV	09 NOV
Total Days	45	30	95	11
No. Nets Used	4*	10-25	1-6	4-11*
Net Hours	409	3090	2173	604
Best Day	38	202	33	23
Date	04 NOV	03 OCT	05 NOV	07 AUG
Banded '94	154	1059	478	295
Banded '95	435	2721	621	148
Total Species '94	31	59	56	42
Total Species '95	37	75	62	37
B/100 NH '94	19	40	31	22
B/100 NH '95	6	88	29	24.5
% HY '94	88%	81%	70%	72%
% HY '95	60%	81%	66%	80%
* plus traps				

Table 1. AFR II - Summary of Operations 1995

	Kestrel Haven	Vestal	Pierce Creek	Ellenville
Start	11 JUL	02 AUG	26 JUL	01 AUG
Stop	06 NOV	10 NOV	18 NOV	01 NOV
Total Days	83	75	20	38
No. Nets Used	1-18	3.75-10.5	2-6	7-8
Net Hours	2208	1261	660	972
Best Day	116	95	60	47
Date	19 OCT	28 OCT	23 OCT	19 OCT
Banded '94	2103	486	321	496
Banded '95	2683	1165	402	402
Total Species '94	86	57	42	56
Total Species '95	92	67	38	46
B/100 NH '94	79.5	44	46	46.5
B/100 NH '95	122	92	61	41.4
% HY '94	87%	79%	77%	71.5%
% HY '95	88%	67%	72%	55%
* plus traps				

Table 2. AFR II - Most Frequently Encountered Species -1995

Farmersville Station			Braddock Bay			Alfred Station			Spring Hill		
Species	No.	% HY	Species	No.	% HY	Species	No.	% HY	Species	No.	% HY
SCJU(7)	111	40	WTSP(3)	524	87	SCJU(2)	66	44	BCCH(3)	31	87
BLJA	46	85	BCCH(10)	457	78	BCCH(3)	63	59	GRCA(4)	17	76
BCCH(1)	46	87	HETH(5)	173	83	COYE(4)	38	64	REVI(10)	15	80
AMGO(10)	43	53	RCKI(1)	171	NA	SOSP(9)	38	87	COYE	10	90
PUFI	37	84	YWAR(7)	143	99	RBGR	33	75	RSTO	7	86
MODO(8)	15	53	GCKI(2)	136	NA	INBU	32	89	SOSP	7	71
COYE(3)	15	93	GRCA(10)	112	93	GCKI	25	NA	VEER	6	83
HOFI(2)	15	60	SOSP(9)	80	79	MAWA(1)	23	67	WTSP	5	80
ATSP	12	NA	REVI	78	89	WTSP	23	90	SWTH	4	100
WTSP	10	20	SWTH	77	71	AMGO(6)	22	36	RCKI(9)	4	75*
									OVEN	4	78
% of Total Banded	80%			72%			58%			74%	

* = Percentages for those where skulling was possible.
 (#) = Indicates ranking last fall.
 NA = Not Attempted.

Table 2. AFR II - Most Frequently Encountered Species -1995

Kestrel Haven			Vestal			Pierce Creek			Ellenville		
Species	No.	% HY	Species	No.	% HY	Species	No.	% HY	Species	No.	% HY
SOSP(1)	501	94	WTSP(7)	183	77	SOSP(1)	133	80	RCKI(3)	84	35*
GRCA(2)	162	90	SCJU	130	32	AMGO(6)	43	67	SCJU(6)	37	35*
COYE(3)	155	90	GRCA(1)	105	86	WTSP(5)	35	80	GCKI	35	60*
AMGO(10)	155	87	SOSP(2)	72	50	GRCA(3)	29	83	BCCH	33	73
BCCH(9)	131	99	REVI(3)	69	91	BCCH(8)	24	54	GRCA(1)	26	69
YWAR(6)	115	89	HOFI(4)	60	53	AMRO(9)	20	85*	WTSP(4)	25	40
WTSP	105	84	COYE(5)	57	77	SCJU	20	70	SOSP	16	81
AMRO	95	45*	AMRO	55	69*	BLJA	11	9	COYE(2)	15	73
RCKI	80	88*	HETH	54	85	ATSP	7	29	LEFL	10	100
MYWA	72	96	BCCH(8)	28	75	NOCA(10)	7	57	HOFI	9	56*
WCSP	62	48	RCKI	28	80*						
% of Total Banded	61%			73%			74%			72%	

* = Percentages for those where skulling was possible.
 (#) = Indicates ranking last fall.
 NA = Not Attempted.

Farmersville Station
Cattaraugus County, NY
Donald F. Clark

422-0782

This is the 27th report for the Atlantic Flyway Review. A total of 435 birds of 37 species were banded, weighed, and measured. This is near the average for all these years and much better than last year. Banding started in August and continued into November. I banded 45 days using four mist nets plus traps. The net lane used was one that has been in use for all 27 years. This year, it was not very productive; I still had to work around an electric fence used to prevent the beaver from flooding it. In all, I had 122 repeats and 20 returns.

Only 33 warblers of nine species were caught. All, except a few Common Yellowthroat, were caught in August. Species that were caught in fewer numbers this year were thrush, catbird, vireo, and House Finch. Slate-colored Juncos exploded in numbers and other sparrows were here in good flocks.

The weather was extreme. August and September were lacking in rain, but October was very wet. The first snow was 4 November; and by the end of that month, we had 46+ inches. This is way above average for this area and ski resorts were open and running early. The snow also resulted in some interesting birds coming to feeders. Evening Grosbeaks were here for the first time in two years joining Fox Sparrows, Red-bellied Woodpeckers, Red-breasted Nuthatches, early American Tree Sparrows, Northern Shrikes, Eastern Bluebirds (first in 20 years), Rufous-sided Towhees, and an Osprey.

This year we invested a fortune (for us) in Triploid Grass Carp to help control the weed problem in our ponds. The Osprey that migrates through here each year is normally seen on one or two days. This year it stayed three weeks. We did not see it catch any of the fish but we sure kept our fingers crossed every day!

Canada Geese are here in quantity. Although the regular goose hunting season was suspended due to the 75% decrease in Canadian nesting flocks, our "nuisance" geese that breed locally are increasing by leaps and bounds. One hundred to 200 geese rested on our ponds every day. We did

report three orange neck-banded geese to DEC. They were banded at Ungava Bay in northern Quebec. One white neck-banded goose was reported and had been banded in West Virginia in 1993.

An Evening Grosbeak banded in the fall of 1993 was caught and released by Dave Elder of Atikokan, Ontario, Canada, in May 1995. Atikokan is north of Lake Superior.

Braddock Bay
Monroe County, NY

431-0774

Elizabeth Brooks, compiler

Fall banding was carried out for the eleventh consecutive year at the Kaiser-Manitou Beach station by myself, Robert McKinney, and Sharon Skelly, with help from several volunteers. A total of 2721 birds of 75 species were banded. From one to 25 mist nets were used in the same locations as previous years. Vegetation in the study area is managed to promote minimal habitat change wherein constant-effort banding takes place. Banding was done during 3090 net hours on 30 days between 25 July and 6 November, resulting in an 88.1 birds per 100 net hour ratio. The most birds banded in one day occurred on 3 October when 202 birds were banded. Other 100+ days took place 28 July (105), 2 August (110), 9 October (100), 11 October (194), and 12 October (137).

Black-billed Cuckoo, Yellow-bellied Sapsucker, and Yellow-throated Vireo were new species for the cumulative fall list which now stands at 101 forms. No species were banded in record low numbers, while the following 24 species were banded in record high numbers. (Number banded is followed by the 1985 through 1994 average.) Downy Woodpecker 11(2.6); Yellow-shafted Flicker 8(4); Traill's Flycatcher 11(5.4); Least Flycatcher 22(9.7); Black-capped Chickadee 457(135.8); Eastern Tufted Titmouse 8(3.5); Brown Creeper 35(18); House Wren 12(3.6); Winter Wren 43(12.9); Ruby-crowned Kinglet 171(66.8); American Robin 45(18.1); Gray Catbird 112(33.6); European Starling 45(18.1); Solitary Vireo 11(2.3); Nashville Warbler 6(1.4); Yellow Warbler 143(19.6); Magnolia Warbler 66(22.8); Black-throated Blue Warbler 40(10.5); Wilson's Warbler 17(3.8); Rose-breasted Grosbeak 4(0.6);

Chipping Sparrow 7(1.5); Field Sparrow 7(1.5); Baltimore Oriole 12(0.2); and House Finch 29(3.5).

Hypoboscids were observed on one bird of each of the following species: Swainson's Thrush, Red-eyed Vireo, Slate-colored Junco, and White-throated Sparrow. Birds were weighed, scored for fat deposits, aged, sexed, and measured for wing chord. Pertinent data were recorded for ongoing studies of Downy Woodpecker, Cedar Waxwing, and White-throated Sparrow. All repeats were weighed as part of a study to determine weight change and length of stopover. A White-throated Sparrow with orange lores was netted again this year. There were 148 repeats.

Fifteen returns were netted, the oldest of which were a six-year-old American Robin, a four-year-old Black-capped Chickadee, and a four-year-old Yellow-shafted Flicker. All others were second- and third-year birds. One Neotropical, a Red-eyed Vireo, returned in its third year.

Fall results were excellent, with record numbers banded and the highest birds/100 net hour ratio ever. High percent hatching-year numbers in many species reflected a particularly good breeding season, with few cold, wet periods. There was a concerted effort to provide every-day coverage between 15 September and 15 October, the peak of migration at Braddock Bay.

Greg Jones and Chris Roberts, SUNY Brockport graduate students, continued their research on migratory stopover ecology.

Negatives for the season included problems with a feral cat and vandalism which resulted in the loss of three nets. Joanna Klima was the fall 1995 banding assistant, and her help is gratefully acknowledged and appreciated. The assistance and support of Bob Dows, Myrt Harding, Keith Illes, Wojtek Skulski, John Lehr, Brian Mongi, Dick O'Hara, Jean Skelly, Lloyd Swart, and Dave Tetlow is much appreciated.

Special thanks is due Bob, Charlene, and Deb Reed for housing; and to Bill and June Kaiser for their continued support and permission to use their land.

Alfred Station
Allegany County, NY
Elizabeth W. Brooks

421-0774

The 18th year of fall banding at Alfred Station began on 21 July and continued until 8 November. During 95 days of operation, from one to six nets were used in the same locations as in previous years. A total of 621 birds of 62 species were banded during 2173 net hours. Our measure of efficiency was 28.6 birds per 100 net hours.

There were no new species for the station this year. The cumulative fall banding list stands at 100 species. The number of birds banded is above the sixteen-year average of 448 (range 139 in 1975 to 672 in 1982). Problems with a neighborhood dog forced the closing of one net location for most of the season. There were no outstanding days, and the largest catch was 33 on 5 November. Only 10 and 15 August and 24 October saw total daily banding exceeding twenty birds.

On the positive side, there were record high bandings of Yellow-bellied Sapsucker, Blue-winged Warbler, Ovenbird, Common Yellowthroat, Rose-breasted Grosbeak, Indigo Bunting, and Field Sparrow. Red-breasted Nuthatch numbers (11) were second only to 1989, when twelve were banded. Missing entirely were Gray-cheeked Thrush, Black-and-White Warbler, Northern Cardinal, and White-crowned Sparrow. Thrushes, in general, had a very poor showing. Although nineteen warbler species were represented, only Blue-winged, Magnolia, Black-throated Green, Ovenbird, and Common Yellowthroat were banded in numbers over five individuals. There were 202 repeats and 29 returns from previous falls. Returns included 15 chickadees, a Hairy Woodpecker, and a Purple Finch of at least five years, a Yellow-shafted Flicker in at least its sixth year, and a Blue Jay of at least seven years. The highlight was a Rose-breasted Grosbeak in at least its 13th year.

Hypoboscids were found on 23 birds of twelve species. Injuries/abnormalities noted include a Solitary Vireo with no feathers on the back of its head, a Cape May Warbler with a 3.5mm tumor on the upper mandible, a Common Yellowthroat with a right tarsal injury, a White-throated Sparrow with orange lores, a Slate-colored Junco with a recent

left tarsal fracture, and an Evening Grosbeak with an injury to the right eye.

Although open for 95 days, this station has to be counted as a migration sampling station this year. Breaking the requirements for a constant-effort station was a neighbor's dog which destroyed two nets and caused me to curtail netting in one historic location. Timing was also not comparable with previous years in that my involvement with maintaining the constant-effort station at Braddock Bay limited my Alfred banding during the mid-September to mid-October period.

Spring Hill Wildlife Sanctuary 423-0772
Steuben County, NY
Robert G. McKinney

In this, the fourth year of AFR reporting for Spring Hill, results were the poorest yet. In addition to fewer net hours of effort, movement of warblers and thrushes was especially disappointing. Only 148 birds of 37 species were banded over 605 net hours. Commitments at other stations precluded much effort here during the migration, and almost no effort in October; the results were perhaps directly proportional to the light effort this year.

Also negatively affecting migration banding was this station's commitment to MAPS protocol. Many migrants move early at this latitude and my first three migration banding sessions were also MAPS sessions, which preclude operations more than once every ten days. Between MAPS requirements and my absences, many migrants may have been missed. Equipment used was comparable to previous years, with up to 10.5 nets plus a single, and a four-cell Potter trap.

New AFR species for this station were Yellow-bellied Flycatcher, Red-breasted Nuthatch, and Philadelphia Vireo. Obvious by their absence were Traill's Flycatcher, Hermit Thrush, American Robin, Blue-winged Warbler, Chestnut-sided Warbler, Black-and-White Warbler, and House Finch. The Chestnut-sided is a common breeding bird at this location; apparently they all left before I commenced banding.

Kestrel Haven Farm 422-0764
Avian Migration Observatory
Burdett, Schuyler County, NY
John and Sue Gregoire

"WOW" would almost cover this season. Despite fewer days (high winds and rain) and concomitantly fewer net hours, we enjoyed our largest, most species-diverse year ever. We banded 2683 individuals of 92 species during 368 hours of operation on 83 days. We also had 532 repeats, 74 returns, and 84 birds not banded (RTHU, HOSP, EUST), for a total of 3373 netted. Our measure of efficiency rose to a station high of 122 birds banded per 100 net hours for newly banded birds and 153/100 net hours overall. This station has now banded 112 species in the fall migration project. New this season were Red-bellied Woodpecker and American Woodcock.

We had our first returns of Eastern Screech-Owl and Red-eyed Vireo. Older returns included Northern Cardinal and Yellow Warbler at 8+ years, Yellow Warbler and Black-capped Chickadee at 7 years, Gray Catbird, American Goldfinch and Yellow Warbler at 6+ years, Gray Catbird, Brown-headed Cowbird, and Eastern Phoebe at 5+, and a 4+ year Cedar Waxwing. Eight Yellow Warbler and 10 Gray Catbird returns followed 22 chickadees and 12 Song Sparrows.

Constant-effort banding and daily point counts were conducted as previously described, with one major exception to our methodology. We converted to 30mm, 9 and 12X3.2M, 110 denier Finnish nets which performed far superior to our previous Japanese and American nets in efficiency of capture, durability, and kindness to the birds. These soft, tall nets helped account for this record season. Weather was also a big help to us and a hindrance to ease of migration. The Northern Branch of the Jet Stream remained almost circumpolar as opposed to its usual southeasterly dip in fall, and the prevailing winds and weather were from the south. Both factors slowed many flights, contributed to long stopovers, and presented us with a large window of opportunity. August saw 711 birds banded, while October was unbelievable with over 1,000 banded.

We noted very few parasites this year. We netted a Song Sparrow with a deformed tarsus--no foot and unfeathered above the mid-tarsal joint, and a Gray Catbird on 25 August presented with a series of strong fault bars throughout its tail. On 17 September, we captured a HY Common Yellowthroat with complete skull ossification less a small bilateral area over the eyes; and on 21 September, we netted a HY Cedar Waxwing whose tail band had yellow centers outlined in orange! Overall, birds had little to no fat and some catbirds banded in late October were extremely thin. In the net lanes but not netted were a Clay-colored Sparrow, Evening Grosbeaks, and a huge HY-F Cooper's Hawk, whose "net rounds" destroyed our several remaining Japanese mist nets.

Significant (+2 to +7 Standard Deviation on a nine year mean) increases were seen in woodpeckers, kinglets, Winter Wren, Gray-cheeked, Swainson's and Hermit Thrushes, Solitary Vireo, Yellow Warbler, Lincoln's (7 SD), White-throated and White-crowned (7 SD) Sparrows, and Baltimore Orioles. Significant decreases were noted in flycatchers, with the exception of Traill's which were up slightly and Acadian which remained stable. Only two Tennessee Warblers were banded and these did not arrive until mid- and late-October. Of 25 warbler species banded, most were within the normal range.

We were graphically reminded of the woodchuck's ability to become omnivorous during times of stress. Before we corrected the situation, this normally vegetarian took two birds from nets. We assume that it was reacting to the severe drought as well as opportunity.

Sparrows were amazing. White-crowned Sparrows arrived on 29 September and remained until 17 November, accounting for our 62 banded and many repeats. White-throated Sparrows also lingered through year's end. Lincoln's presented an analytical dilemma. The closest known breeding population is in the Adirondacks, some 200 linear miles to our northeast, and it represents the southernmost breeding range of this circumboreal breeder. Between 1 and 5 August, we banded five LISPs, all in juvenile plumage. Either the drought brought them south soon after

fledging, or this area, on the northern edge of the Appalachian Plateau, was host to a new breeding species. Our habitat and altitude is suitable for the latter postulation. Concerns over juvenile identification (could they have been Swamp Sparrows?) were allayed when three of the five repeated in late September/early October having completed their first prebasic (post-juvinal) molt. These five were the harbingers of a large and long Lincoln's Sparrow presence which ended on 26 October, with a record 42 banded over the period, which made them our 15th most numerous species.

Our most unique "capture" was a Green Frog which we found alive and kicking in the top bag of a 3.2 meter high net. This event was coincident with a very large flyover by a migrating flock of Common Grackles--lucky frog!

We ran the station without Gaboons, but are indebted to the Watkins Glen/Montour Falls Lions for their continuing assistance.

Powderhouse Road Station 420-0755
Vestal, Broome Co., NY
Gail Kirch and Harriet Marsi

The summer and fall was one of extremes of weather and banding. Summer '95 was the third driest on record since 1952. Only 6.8 inches of rain (3.9" below average) fell from June through August. This lack of water did not appear to adversely affect nesting success, as our avian productivity banding showed good numbers of fledgling birds for the most common breeding species within our banding perimeter; i.e., BCCH, ETTI, GRCA, REVI, COYE, OVEN, SOSP. Flowers produced less nectar, so numbers of butterflies and honey production by bees were down; however, the berry crop appeared normal. The drought was alleviated by the fifth wettest October on record (6.68" / average 2.89"). The fall was mild with one light frost on 29 September. Banding continued until 10 November.

Comparing 1990 through 1995 data, this fall gave us our highest number of captures. The 1165 banded more than doubled our average of 535. This number is reminiscent of what this station regularly banded in the 1960s and 1970s. We achieved highs in measure of efficiency (92/100

nh/avg. 55), and species diversity (67/avg. 54). In our most frequently banded species, ten of eleven exceeded the five-year average and, overall, ten species showed significant increases (HETH, PUF1, WTSP, PHVI, SWSP, RCKI, AMRO, COYE, SCJU, and REVI). There were no significant decreases.

We didn't add new species but did enjoy some we hadn't seen in years. The highlight was three No.Saw-whet Owls on 18, 23 and 25 October, which were last encountered in 1990. Two Orange-crowned Warblers and two Northern Parulas were species not captured since the 1980s. Nine Philadelphia Vireos was a high for this station since our beginning in 1964 (31 year avg. = 2.2). Hermit Thrush numbers (53) were also a station high (our five-year average of 3.6 is lower than the 31-year average of 9.96).

Nets were set as in previous years. On weekends, Gail Kirch ran the banding operation with help from Harriet Marsi on "big days." On weekdays, Gail made the first net run, leaving birds for Harriet to band. Harriet then made an additional collection and furred nets. During the 1960s and 70s, Harriet ran the station and averaged 800 to 1000 fall bandings, with emphasis on warblers and vireos. Our banding in the 1990s has seen a shift to finches and sparrows. In 1995, 47% of captures were in this category, while warblers/vireos were only 19%. We had an exciting fall banding in terms of numbers and diversity.

Pierce Creek Station 420-0755
Binghamton, Broome Co., NY
Steve Rice

The third year of fall banding at this station covered 20 days of operation and accounted for the banding of 402 individuals of 38 species. We started on 26 July and ended, in a foot of snow, on 18 November. We operated a range of two to six mist nets set in the same locations as in past years. In the final days, the snow caused us to employ traps for twenty hours, wherein we banded American Tree Sparrows.

The breeding season was very dry with a large rainfall deficit, a situation which occurred throughout the region. June through September was particularly dry, with the precipitation deficit

ranging from six inches to over one foot in some areas. During September and October, rainfall approached average, much of it arriving in heavy, two-to-three-inch storm accumulations. Temperatures were slightly warmer than normal, but the increased percentage of sunshine coupled with high humidity made for a grueling period. October was a gem with temperatures averaging above normal. The early November Nor'easter rounded out the season with heavy snowfall.

While the third year of reporting is a little early for establishing trends, a couple of points stand out. Firstly, Song Sparrows, while always our most numerous species, jumped from 77 in 1994 (92% HY) to 133 in 1995 (80% HY). Secondly, Chipping Sparrows fell from second place at 40 in 1994 (80% HY) to off-the-chart at only 6 in 1995 (33% HY). All other species were near average.

Returns included a Chipping Sparrow and two Black-capped Chickadees banded last fall. Eight House Sparrows were netted and released unbanded.

Many thanks to Erin Hewett, a 13-year-old budding bander, for her third year of assistance both at the nets and with record keeping.

Ellenville Station 414-0742
Ellenville, Ulster Co., NY
Valerie M. Freer

Fall 1995 banding was remarkable in several ways, although not in the total number of birds banded, which was close to the 26-year average. The most interesting feature was the dominance by a single species, the Ruby-crowned Kinglet, which comprised 21% of the total captures, a greater proportion than any species in the past, and which saved the season from being one of the worst ever.

The statewide drought that had started in winter continued through August, and the three month period, from June to August, was the seventh driest on record. The lack of precipitation affected insect populations and, therefore, production of young songbirds, resulting in low numbers of birds banded, especially of the species that nest in the region. The August total of 107 birds was below average and was followed by only 58 birds in

September, the lowest number for that month in 26 years. Only 67% of the August birds were HY and 60% of the September birds were HY (both months were 79% HY last year). The severe drought continued into September and was finally alleviated in October when over six inches of rain fell.

The Gray Catbird, always one of the most common birds at this station, was greatly affected by the poor nesting season. Only 26 were banded (compared with a 26-year average of 50), and of those, 69% were HY (90% HY in 1994).

The number and diversity of warblers banded was also way off. Only 51 warblers of 13 species were

banded, comprising 15% of the total catch, as compared with 185 warblers of 20 species last year, when they were 37% of all birds captured.

More than half of all birds banded were caught after 1 October. The two species of kinglet dominated, together taking up 30% of the season total. More Ruby-crowned Kinglets (84) were caught than ever before; the next highest season total was 57 in 1976. Thirty-five Golden-crowned Kinglets were netted, the second highest ever for that species, topped only by 43 banded in 1989.

The station's trend toward decreasing diversity continued, with just five species making up over half of the total number of birds banded.

CAPE MAY RAPTOR BANDING PROJECT 1995 YEARLY REPORT

1995 was the 29th consecutive autumn season of operation for the Cape May Raptor Banding Project (CMRBP) at Cape May Point, New Jersey (385-0745). During the 1995 autumn migration season, we captured a total of 4,327 raptors of 16 species. This total includes 3,658 hawks of 12 species (Table 1) and a record breaking 669 owls of four species. For an in-depth discussion of the remarkable results of our 1995 owl project, see the article by Katy Duffy in this issue. The hawk total was the highest in five years but was slightly below the project average since 1980. These capture totals resulted from the operation of up to four hawk banding stations between 4 September and 30 November for a total of 2,183 station-hours on 259 station-days of capture effort. Since 1967 we have captured a grand total of 92,821 hawks of 16 species. Capture techniques have been previously described by Clark (1970. *EBBA News* 33:181-189; 1981. *J. Wildl. Manage.* 45:1043-1044). Highlights this autumn included new season records for Red-tailed Hawk (443) and Cooper's Hawk (909). The project's first adult Bald Eagle was captured on 6 September, and the first adult Swainson's Hawk was captured on 8 November.

This season's total of 127 Northern Harriers was slightly better than our average of 123 per year since 1979. Harriers were captured in low numbers from mid-September through late

November. For the first time in several years we had no double digit harrier capture days. Adult capture rates were higher than usual with quite a few adult females banded later in the season. Our Sharp-shinned Hawk capture total of 1,426 was the highest season total since 1990. However, after accounting for increased capture effort, this autumn's capture rate per hour was identical to that of 1994. The total was also more than 1,000 less than our project average since 1976. Figure 1 shows the number of Sharp-shinned Hawks captured per hour of station operation since 1979 for the period 21 September to 7 November, when 92% of yearly sharp-shin captures occur. The decline in sharp-shin capture rates during this 17-year time period has been both dramatic and highly significant. This season's total of 909 Cooper's Hawks was significantly higher than the previous project record of 654 in 1993 and continued a ten-year increase in capture rates. During the first half of October, which is the peak time for *Accipiter* migration at Cape May Point, on 10 of 15 days we caught more Cooper's Hawks than Sharp-shinned Hawks. On 29 September we set a new daily record of 75 Cooper's Hawks (compared to only 26 Sharp-shinned Hawks the same day). Most of the 12 Northern Goshawks were captured in mid to late November. An adult male captured on 19 November was the first adult goshawk captured by the CMRBP since 1991. The 443 Red-tailed Hawks was a new project