drizzle at 0930 and 1430. To the south it was raining. This combination of clear skies and high pressure to the north and a meteorological "dam" to the south produced bird takes exceeding 100 B/Cn-h. Impressive was the fact that birds came actively on 9/18 until 1430 when we quit in self defense after a record take of 380 birds. Merritt returned on 9/19 and had a bird yield of 97.4 B/Cn-h as he banded ahead of an incoming front that brought overcast skies and finally rain late in the day. This condition ahead of an incoming front has proven to be one of the most productive at VF.

September 24-25 - A front passed during the night of 9/23-24 to give a clear day on 9/24 with NW wind. There was much activity that evening as the first surge of white-throats began. Normally we do not experience catches of 175 B/Cn-h, as we did on this day, after frontal passage. However, this was because another weather system was immediately on the heels of the one just past. Cloudiness set in overnight thereby moderating the air and gave a mellow, pleasant condition on the following day typical of an high-pressure system that is several days old and stagnant. Later that day, high-altitude ice crystals gathered out of the NW as rain began to the south and on the following day, 9/26, it was cold, raw, damp and overcast.

Under these conditions, the birds moving on 9/25 were affected by two weather systems. The front and NW wind of 9/24 would have sent them over us to the coast or further south. An incoming second front intensified their movement through the area, while at the same time the rain to the south was preventing their through passage and was grounding them. Thus, we netted a record 468 birds for a yield of 148 B/Cn-h, and the activity lasted until 1600. The record one-day catch of 380 birds on 9/18 had not survived its first test one week later.

October 2-3 - All during the previous week from Wednesday on passage of a cold front had been predicted. High pressure to the south delayed this and gave pleasant, calm weather instead. On 10/2 it was very unseasonably warm in the 80's. Under this kind of high-pressure stagnation which is generally so favorable to high bird takes, the white-throats gathered poised by the hundreds waiting for a frontal system to move them out. Coming at the peak of the white-throat season, as it did, we could expect an high take. The daytime warmth had subdued all bird activity, but toward sunset, the sparrows became active and rose up almost like locusts. We banded 206 that day for a new record one-day take of this species. Our bird yield was 202 B/Cn-h or 337 captures. That night the sky clouded to give an overcast condition at dawn with east wind. There was considerable activity with a yield of 236 birds or 113 B/Cn-h. The overcast lasted all day and at dusk came rain. Our weekend take of 573 birds was nearly equal to the previous weekend's record catch of 575.

October 9-10 - A coastal low brought rain and a great grounding of birds, many of which were white-throats awaiting clearing weather. On 10/9, the rain stopped in the afternoon and we were able to put up nets and very quickly took 111 birds and had to furl because of rain before dark. Our yield was 189 B/Cn-h and would have been muchhigher had we not been robbed of the last hour of daylight which is usually so productive. Our nets remained furled all night. The next morning, with birds as active as we had ever seen them at anytime this year, we took down our nets in the rain. Had we been able to net the area, we would easily have had another 500+ bird weekend.

Thus we have come to appreciate the differnces of inland vs. coastal banding. Whereas coastal concentrations are greatest when borne upon NW winds following frontal passage under clear skies, our greatest catches are made when stagnant weather immediately preceding frontal passage has gathered large numbers of pausing migrants; or when meteorological "dams" to the south prevent through passage of migrants. One other difference relates to the hours of bird activity. Coastal stations typically have heavy morning activity and very little or no evening activity. At VF the area serves a

different function in the migrational scheme, and rather than be a migrational thruway or landing strip, as many barrier beaches are, it is a gathering or fueling area with a more subtle through-migration activity. The high number of repear and return captures bear out this concept.

Banders - Robert P. Yunick - all dates except 8/28, 29, 9/19 and 10/15.
Will D. Merritt, Jr. - all dates except 9/2, 3 and 10/16.
Robert J. Pantle - on 9/17, 18, 10/2, 23 and 24.

Assistants- James C. Covert III - most all dates.
Harvey H. Spivak - through early September.
Rita Pantle - helping RJP.

Acknowledgement- It is again a pleasure to acknowledge with thanks the efforts of the above people in making this banding operation a more meaningful endeavor. Also, we once again thank the N.Y.S. Department of Environmental Conservation for use of the area.

Robert P. Yunick

SALISBURY, NEW YORK

All banding operations at Salisbury, New York have been of an experimental nature to determine the following:

1. What species of birds go through the area?
2. In what numbers do they occur?
3. At what time of year is banding most productive?
4. What methods of capture are most succesful?
5. What areas are best suited for the use of nets and for seed traps?
6. What are the limiting factors?

A review of the information collected to date gives the following information:

1. A large number of species pass through the area; (67 species were banded in 1971).
2. The numbers present vary from year to year but are sufficient to justify a more extensive operation.
3. While there is some variation in dates from year to year the most productive periods have been from April 1st to June 15th and from September 1st to November 1st.
4. Mist nets capture the most species and also the largest numbers. Seed traps are effective in capturing the seed-eating groups but are not suited to other species.
5. Suitable areas have been located for the use of seed traps and also for mist nets.
6. Chipmunks constitute the greatest limiting factor for the seed traps in this area. They are super abundant in the old stone wall fence rows and one must choose between feeding chipmunks and banding birds. The chipmunks quickly remove the most desireable parts of the seed used for bait, and their presence at, and, in the traps keeps many of the birds away. The other limiting factors are the physical efforts required, the time required to tend the nets, and the seed traps, and to process the birds captured.

In 1971 banding was carried on from April 24 to June 15 and from September 1 to November 1. A total of 2,492 birds were banded which included 67 different species.

Mist nets were used from May 15th to June 15th and from September 1st to November 1st. The nets contributed the largest number of species taken from 32 to 67. They were tried in various locations and were much more succesful in sheltered areas. Seed traps were less succesful this year than before. Several factors contributed to this: 1, The pattern of agricultural crops, in surrounding areas, was less favorable. 2, The crop of wild seeds and fruits was abundant in the area because of good growing conditions all summer. 3. The weather remained high until after the first of November, when banding was discontinued. No hard frosts and no heavy movements of sparrows had taken place. 4. The number of chipmunks about the traps was larger because less time was devoted to removing them.

Results to date seem to justify a more intensive effort and a standardization of proceedures so that comparisons between seasons will be more meaningful. Health permitting, I may try this in 1972.

Leroy C. Stegeman

FRIENDSVILLE, PENNSYLVANIA

The fall of 1971 was the third year of fall migration study at the Friendsville, Pa., station. Six nets were used for an average of four hours daily. Netting was done on 46 days using the period from Aug. 5 to October 30. Total net hours: 1224; with 528 new birds of 57 species banded. This year three of the nets were moved to a new section of lanes, one to a lane surrounding a large pond and two to lanes in a large vegetable garden. These nets captured 84% of the total number of birds banded. The five most numerous birds trapped were: Chipping Sparrow, 91; Myrtle Warbler 68; American Goldfinch, 64; Song Sparrow, 43; and Eastern Phoebe, 24. Three new species were banded: Palm Warbler, 2; Rusty Blackbird, 2; and Cape May Warbler, 7.

At this station an obvious absence of Ovenbirds, White-throated Sparrows and Black-capped Chickadees was noted. Possibly this is a result of the net changes.

As this is only the third year of comparable studies made for this inland station it is hard to analyze the collected data and make any positive conclusion. It does appear that the general direction of the movement of birds through this station is from southwest to northeast, possibly to the Susquehanna River and its tributaries and then southward. It also appears that the agricultural practices in the area have a great influence on the numbers and species captured.

This has been a warm, calm fall with very little frontal activity and no strong winds. Days with the largest daily totals of captured birds were September 7, 21, 26, 30, October 1, 2, and 19. The largest number of species banded on a day was 11 on September 21.

Claire E. Gottschall

ELLENVILLE, NEW YORK

Banding operations at this station this fall were kept as nearly the same as in 1970 as possible. The same number of nets were used (10) on the same number of days (36) in the same net lanes (see EBBA NEWS 34 (2): 97-98 for description). The nets were set up for about four hours a morning every second or third day. The total number of net hours was close to 1970: 1207 vs. 1293 this fall; but the total catch was down from 700 last year to 567 this year.

In addition to that basic banding plan, two or three nets were operated by Frank Fish in scrub willows bordering Cape Pond, some 600 yards to the southwest of my netting area. His nets were in use in the morning on most days between August 24 and September 25. His species and numbers were similar to those of the upper lanes, with one exception - he caught twice as many Cedar Waxwings, reflecting the fact that they were still nesting in the vicinity of his net lanes.

The following figures (and the remainder of this report) include results from both areas:

	1970	1971
Birds banded	700	705
Net hours	1207	1530
Birds/100 NH	58	46
No. of species	65	58

The most abundant species was the Catbird (84); other common birds were White-throats, Chickadees, Song Sparrows, and Yellowthroats.

The weather was recorded from several sources: a recording barometer, N.Y. Times weather maps, and daily notes on temperature, cloud cover, rain, wind, etc. It was hoped that approaching cold fronts could be anticipated so that no waves of migrating birds would be missed, but the weather did not cooperate this year. The first cold front passed through on August 11, dropping the temperature about 15 degrees. Banding was fairly good on the 10th and 11th, just prior to the passage of the front. (Little did we guess that we would not catch as many birds in a day again until early October, more than seven weeks later!) Another weak cold front passed on August 22 with no appreciable effect on banding. It was too windy to band on the 23rd, and the cooler air on the 24th and 25th brought only a few birds. August had begun with three or four days of rain; on the 27th tropical storm Doria began to affect us and we had over five inches of rain to end the month in the same way. For the entire three months we were never able to check the nets without wearing boots, as the lanes never dried out.