

MARSHFIELD, VERMONT

1971 produced another good banding session in August, September and October at Marshfield Station. It is located in Washington County at 441-0722. The banding is done on an island reached by 250 feet of boardwalk through a swamp. If anyone is interested in more detail of the island feel free to write me.

Banding operations were carried on mostly week-ends and one span of a complete week. The beginning date was August 7th and ended October 24th for a total of 40 banding days and 2,194 net hours. 66 species and a total of 2,172 birds were processed. From 2 to 9 nets were in operation. I am the only bander with 2 and sometimes 3 assistants. There were 320 repeats and 33 returns. In 15 years at the same location, this is the first time we have ever had foreign retraps. We netted a Black-cap Chickadee that was banded at Woodstock, Vermont in 1970 and a Purple Finch we do not have the banding information for, as yet.

Like many other stations this year we received our share of Black-capped Chickadees, 174 banded. In roughly the same amount of time as former years, there were significant increases in Solitary Vireos, Nashvilles, Tennessees, Black-throated Blues, Chestnut-sideds, Red-starts, Swainson's and Hermit Thrushes. Birds of interest netted were a Saw-whet Owl, Sharp-shinned Hawk, Orange-crowned Warbler, and 1 Boreal Chickadee. The returns are as follows: 17 Purple Finches, 3 B-C Chickadees, 1 Canada Warbler, 2 Chestnut-sided Warblers, 1 Swamp Sparrow, 1 White-throat, 1 Northern Waterthrush, 1 Hermit Thrush, 1 Red-eyed Vireo, 1 Red-breasted Nuthatch and 1 Parula Warbler. Of special interest, 1 Canada Warbler, 1 Chestnut-sided Warbler, 1 Yellowthroat and 1 Parula were over 4 years old.

Mrs. Marion Metcalf

GLEBE FARM, SOUTH LONDONDERRY, VERMONT

August 1, 1971 to October 6, 1971

Glebe Farm lies on the western slope of the Green Mountains, 100 acres "more or less" as all old Vermont deeds say. My trapping area is that part near the house - perhaps one-half acre. I use water traps only. No mist nets and no seed traps except in winter and on rare occasions during the summer months. In 1971 I could use only six water-traps because last winter's deep snows left some of the trap locations soggy. As we expected to be away for a month, the traps were dismantled on October 6th and stored in the barn. But even when the traps are in their banding locations, they are unset whenever I am away from home - be it for two hours, two days, or more. Mine is a one-person banding station.

Our 1971 fall was noted for its extraordinary mildness. As usual Purple Finches were the most numerous species banded - 568 in the 67 days of the AMFO period. The White-throated Sparrow was the next most numerous species but they were slow to get started migrating and just began to come through in numbers on October 5th. There were fewer Lincoln's Sparrows and other fall migrating sparrows than usual. It seems likely that they too, were late starting on their southern trek. But the most startling difference between 1970 and 1971 was demonstrated by the Ruby-crowned Kinglet.

In 1970 the first R-c. Kinglet was caught on August 18th and I banded a total of 79 (35 in the comparable 67 days --that is, August 1st to October 6) In 1971, the first R-c. Kinglet did not appear until September 28 (41 days later than in 1970) and between September 28, 1971 and October 6, 1971 only seven Ruby-crowns were banded.

I am continuing studying the soft parts of birds and also the homing instinct in the Blue Jay.

Betty Downs

VISCHER FERRY, NEW YORK

This year's banding effort at Vischer Ferry Wildlife Management Area was the most productive of our eight such seasons to date. The operation was again conducted on a weekend basis involving banding on Friday evenings and Saturday mornings through September, and Saturday afternoons and Sunday mornings in October. Coverage extended from August 28 to October 24 and included 2480 net-hours, down 23 percent from last year's 3230 n-h. when coverage began in July. A record catch of 2807 birds of 63 species gave an unprecedented yield of 113 birds per hundred net-hours (B/Cn-h). This bird yield is about double a normal year's take and more than double last year's 52.9 B/Cn-h average. Adding the 62 returns and 535 repeat captures to this catch gives a total capture of 3504 or 137 B/Cn-h.

A great abundance of several species, and very favorable weather conditions on three peak weekends in late September and early October produced this record take. Many new maxima were set. The Cape May warbler was the only new species added to the capture list, however, the banding of our first hummingbirds brought the list to 108 species banded. This year's species take of 63 was down from last year's 75.

It became all the more apparent that weather exerts one of the most profound influences on the apparent abundance, or apparent degree of migration, that we observe as gauged by the numbers of birds in our nets. "Favorable" weather conditions, which this year generally meant clear weather to our north and cloudiness, rain and/or frontal activity to our south, produced massive groundings of migrants and led to record captures. Under more normal weather conditions, frontal systems would have swept out to sea leaving no meteorological boundary over land, and our area would have been overflown by most migrants. The geographical boundary of land and sea would have served as the concentrating interface for migrants in such cases.

Another notable aspect of this fall's weather was its extreme mildness. While we are accustomed to visiting the net lanes on frosty October morns at a rather brisk pace in order to keep warm, this year we had not experienced a killing frost by October 24. October temperatures were more like those expected in September.

Rather than comment on each weekend's weather, I should like to comment on those that brought large catches to our nets. September 17-19 - A cold front that passed on 9/15 became stationary to the south on the 16th and remained in the NYC - northern NJ area through 9/18. Early on 9/17 it influenced us with cool, overcast weather. During the day the air became humid, but by dusk it cleared. During the night of 9/17-18, the overcast of the stationary front moved north just enough to engulf the area again. Overcast skies threatened rain and actually produced a brief

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 much higher had we not been robbed of the last hour of daylight which is usually so productive. Our nets remained furlled 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 differences 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 repeat 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 successful?
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 desirable 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.