

ANOTHER EXPERIENCE WITH EVENING GROSBEAKS IN CANADA

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In EBBA NEWS, Vol. 26, Nos. 1 and 6, and in Vol. 27, No. 1, we summarized a study which Mrs. Parks and I had made of an Evening Grosbeak nesting area in the Canadian province of Quebec during 1962 - 1964. Last spring, realizing that our Quebec site had been deserted by this species, we decided to investigate a concentration of them which we learned was to be found in the Miramichi watershed of New Brunswick.

We crossed the border at Ste. Croix shortly after noon on June 14, 1965, and very soon we began to hear the unmistakable calls of Evening Grosbeaks as we drove along the spruce-edged highway. Individuals and small groups were encountered pecking in the gravel on either side of the blacktop. Here and there battered bodies told the story of others that had been struck down by passing autos.

About 40 miles beyond Fredericton we found an appealing tourist cabin (in the town of Astle) which we decided to make our headquarters while we surveyed the region for a satisfactory trapping location.

We had noticed, during our trip, that graveled driveways which joined barns and garages to the highway were populated, more often than not, by a few Evening Grosbeaks pecking at the bare ground. Slightly less than 100 yards from our cabin and on the opposite side of Route 8 we discovered just such a driveway, deeply rutted and with the added feature of a well-filled mud puddle near its middle. A half-dozen of the birds close by the puddle completed a very appealing picture. It did not take us long to decide to postpone further exploration until we had tried to entice some of these birds from their natural food and into our traps by means of sunflower seeds. Mr. and Mrs. Wayne Hunter were most cooperative. They granted us unlimited permission to use their driveway while they employed a roundabout path to their barn in order to circumvent our traps.

We had brought with us the same pair of 3-celled Potter traps that we had used in Quebec. Early in the morning of June 15 we set these traps on the bare ground by the puddle. This placed the nearest trap a measured 2 feet from the edge of the macadam of heavily-traveled Route 8. In a surprisingly few minutes some birds found the bait and a female was captured. By nightfall 11 more females and 17 males had been released wearing our bands.

Having carried on our previous study in the complete seclusion of the Quebec bush the contrast of this trapping site so close beside a thruway proved almost shocking. We soon came to realize that there was no local speed limit on this arrow-straight mile-long portion of Route 8 which passed between our cabin and our traps. It became apparent that this straightaway challenged almost every driver to test the utmost capabilities of his car's engine. Needless to say, these speeding autos passing by so very close to our traps did not serve to add tranquility to the activities

of the small groups of birds which sought the seeds therein. Remarkably, however, after each of the violent passings-by the birds regained their composure and returned almost at once to the traps in an attempt to feed again.

Large numbers of Cowbirds and lesser numbers (but, still, far too many) of Grackles also found the bait and complicated our efforts by springing traps or plaguing trapped Grosbeaks. Several menacing Crows added unwanted excitement to our work and 4 noisy Ravens frequently panicked flocks of Grosbeaks from nearby trees although they were never observed to alight on the ground anywhere near the traps.

Our activities captured the interest of a considerable group of young people ranging from two toddling tots to four bicycling grammar school boys. Their interest was sincere enough, but their energetic "assistance" we could very well have gotten along without. They persisted in "helping" us throughout our stay.

Anyhow, we endured these complications, and in 6 days of trapping (June 15 - 20) we placed bands on 208 males and 64 females, a total of 272 Evening Grosbeaks. We also trapped 5 "foreigners," all males, and 49 repeats were handled. We shall allow the following table to summarize these records:

Table I. EVENING GROSBEAKS TRAPPED AT ASTLE, N. B.

Date (1965)	BANDS		BIRDS TRAPPED				BIRDS HANDLED	
	M	F	Daily Total	Cumulative Total	Foreign Retraps	Repeats	Daily Total	Cumulative Total
June 15	17	12	29	29	0	1	30	30
16	50	19	69	98	2	9	80	110
17	61	21	82	180	2	17	101	211
18	44	10	54	234	1	11	66	277
19	12	0	12	246	0	6	18	295
20	24	2*	26	272	0	5	31	326
21	0	0	0	272	0	0	0	326
22	0	0	0	272	0	0	0	326

*The plumage of one of these "females" showed recessive, but clear, male characters.

Table II. FOREIGN RETRAPS CAPTURED AT ASTLE, N. B.

Band No.	Age	Sex	Trapped and Released (1965)	THIS BIRD WAS Banded		Date
				By	At	
55-110436	A	M	June 16	E.A.Carrier	Bloomfield, Conn.	1/28/59
59-142285	A	M	"	D.L.Bordner	State College, Pa.	1/26/62
62-189728	A	M	June 17	A.H.Fast	Arlington, Va.	1/10/64
63-180024	A	M	"	G.W.Eaton	DuBois, Pa.	1/14/64
65-159849	A	M	June 18	C.Miller	Inwood, W. Va.	2/02/64

By chance we had chosen for our study a region in which the pulpwood forests had already been scheduled for aerial spraying by planes of the Provincial Department of Forestry. Based at the Taxis Airstrip not more than 4 air-miles due west of our cabin these spray-planes, flying in groups of 4, put on an expert display of aerobatics while they sprayed all of the woodlands within range of our sight. We learned that similar spraying had been done by planes based at Fredericton and that, simultaneously with the display we witnessed, other planes were carrying on similar work from other bases at the Kesnac, Juniper, and Dunphy airstrips. In all, 59 planes were involved in these operations. So we were presented with our second opportunity to observe how aerial spraying might affect a population of Evening Grosbeaks.

This spraying was done at dawn and at dusk on June 15 and 16. We had no personal experience regarding the dispersal of these birds prior to the 15th, but information gleaned from residents of the area indicated that there had been no appreciable recent change in the degree of concentration.

Examination of Table I reveals that on June 15 and 16 (the spraying days) we trapped 29 and 69 birds, respectively. On the four days that followed, our count soared to 82, then dropped to 54, then 12, then 26. And then, on June 21, a marked change in behavior pattern occurred. On this date plenty of Evening Grosbeaks were seen, but all of them were in flight, in pairs, or in small groups of from 3 to 7. Almost all were heading westward and none stopped in the vicinity of our traps; in fact, almost none stopped anywhere within sight. This westward movement continued on the 22d, also, without even one bird being trapped. (Next morning we retrieved our traps and came home.)

We find it impossible to assess the amount of influence the spray may have had on this movement of the birds. It is worthy of note, however, that about four days are required for sprayed pesticides to produce peak leishman mortality. This fact places peak mortality around our trapping site on June 19 or 20. Is it merely an interesting coincidence that only a day or two after these dates there occurred the mass exodus of Evening Grosbeaks that we have recorded? The exodus may as well have been triggered, perhaps, by the extremely hot weather which set in at that time to the accompaniment of smart westerly winds. Or might it not have been a normal migratory urge? After all is said and done, it seems that the French have a very valid reason for calling our favorite species "le Gros-bec Errant" (the Wandering Grosbeak).

There appeared to be a very wide dispersal of Evening Grosbeaks throughout the Miramichi watershed. The population was not dense, however, and it was very fluid. Some pairing was indicated, but we were unable to discover any actual nesting. Although the area had been sprayed during the spring of 5 consecutive years prior to our 1965 visit the species has persisted, but with some density variation from year to year. The concentration in 1964 apparently had exceeded greatly the ample population we found in 1965. We were told that the large flocks of birds feeding on

the gravel shoulders of the roads were actually a hazard to automobilists, and in many towns they were considered as pests. One man told us: "Last year when I'd get home from a drive I had to dig Evening Grosbeaks out of my car's radiator and wash them off the windshield. It was a mess." Another person said: "Last year the road was lined on both sides with dead Evening Grosbeaks." On our own excursions between June 15 and 22 we picked up and examined 10 dead males and 4 dead females; none wore a band.

The fact that Evening Grosbeaks have persisted in this region in spite of the spraying would indicate that the spruce budworm also remains. This is upheld by the statement of a Provincial Forest Ranger who told us: "I am finding budworms on trees this year where none were found in '64." It emphasizes, too a significant difference between the type of spraying we watched here in New Brunswick as compared with that which we experienced during our 1962 visit to Quebec.

In Quebec the poison came down from the spray-planes in drops, like heavy rain. There, too, the supervisory personnel expressed as their goal the elimination of the spruce budworm pest -- a goal which seems to have been eminently successful in the area which we were studying. In New Brunswick the fine mist which drifted down from the spray-planes suggested a refinement of the spraying procedure. What is more, Mr. D. R. Macdonald, one of the N. B. forestry biologists expressed their attitude in these words: "We do not use the work 'eradicate' in describing our spraying procedures. We no longer attempt to destroy every last budworm, but rather to control the population and to prevent it from becoming so numerous as to be destructive to the forests. Thus, there is being left adequate food for a normal number of birds."

At Parker Ridge we found a group of Canadian Wildlife biologists under the direction of Dr. C. D. Fowle who were conducting exhaustive experiments to determine the effects of the spraying on all wildlife, but especially on birds and fish. One phase of this study was to compare the effects of DDT with those of other poisons. Complete results are not available at this writing, but we have learned that they found phosphamidon harmful to birds and they have warned that "it is to be used with extreme caution." To discover this show of teamwork between foresters and Wildlife personnel was, indeed, a satisfying experience.

In brief summary: it seems apparent that Evening Grosbeaks will continue to frequent sprayed forests if adequate controls have guided the spraying procedures. While studying this situation during the spring of the sixth successive year that the Astle, New Brunswick, area was sprayed, we trapped and banded 272 Evening Grosbeaks during 6 consecutive days and using only two 3-celled Potter traps. Although no birds were trapped during the seventh and eighth days, many still remained in the vicinity. No nesting was discovered, but a letter from Mrs. Hunter reports that young birds were being fed there by the parents during July. The same letter told of "a vast quantity of these birds" remaining thereabouts after we had left.