EVENING GROSBEAKS IN NEW BRUNSWICK -- CHAPTER IV By Mr. & Mrs. G. Hapgood Parks

(The first three "chapters" of this story were carried in EBBA News, as follows: Vol. 29, No. 4; Vol. 30, No. 1; and Vol. 31, No. 1.)

There were many times during the winter of 1967-68 when it seemed that Capter IV of our series on Evening Grosbeaks in New Brunswick would never be written. The senior author's bronchial disorder (which had its origin in a cloud of poisonous pesticide discharged by a pair of low-flying forestry spray-planes on the morning of June 20, 1966 at Astle, N.B.) had worsened persistently in spite of professional diagnosis and medication. His activities had become so restricted that another June venture into Canada seemed very problematical.

Perhaps it was inspiration gleaned from the small flocks of Evening Grosbeaks which came to our Hartford, Connecticut banding station between December 18 and March 23 that impelled us to make another try. Perhaps the inspiration rode in the official letter that brought to us the information that no pesticide spraying was panned during the 1968 season for the Astle area. Be that as it may, by the time it became really certain that our unbelievably early spring had come to stay we had completed the necessary prerequisites for our fourth banding study in New Brunswick. We felt unable to expend more than a single week's effort this time, but, leaning heavily on experience gained during our three previous visits, we arrived at Astle near mid-afternoon on June 12, 1968.

There had been little during the drive through constant drizzle and frequent patches of dense fog to arouse our enthusiasm. No Evening Grosbeaks were seen nor heard until two females flew up from the shoulder of the road as we passed through Nashwaak Village about 35 miles short of our destination. Two flocks, of six and ten respectively, with sexes essentially equal, were counted near Nashwaak Bridge, a dozen miles farther along. As we braked to a stop at the cabin that we had reserved for our stay at Astle, a mated pair alighted in the muddy driveway just ahead of our car. It was not an overwhelming welcome, but our spirits were warmed by the intimacy those two birds displayed.

Our first move was to call on Mr. Joseph Munn whose driveway had been so fruitful during two of our previous visits. Our enthusiasm was not at all improved when Mr. Munn reported that scarcely an Evening Grosbeak had visited his driveway. His explanation that "perhaps they're coming late" was encouraging, but it was difficult to justify when we considered the advanced stage of grass, plant and tree growth which was the result of this spring's very early arrival. He told us that a flock of 16 had alighted for a few minutes the previous day and, as we talked, two pairs flew unhurriedly overhead. Foul weather continued throughout the night and we arose early on June 13, our first planned day of banding, to find rain still falling steadily. With the exception of a raised portion about one yard square near our doorstep the entire driveway was under water. We tossed a handful of sunflower seeds onto this raised gravel. Later, these rain-soaked seeds were discovered by a pair of equally rain-soaked Evening Grosbeaks which ate of the replenished supply several times. During the rainy afternoon another pair joined them. Our disappointment at the inclement weather was not shared by a male Barn Swallow which exhibited supreme enjoyment just outside one of our windows. Perched there on a power wire he bathed in the downpour. Fluttering his wings he squirmed and wriggled his body ecstatically as his mate brooded the nest beneath the roof overhang close by. Twin drops of rain dripped from the long tips of his forked tail. Simultaneously, a young Robin registered equal pleasure as it splashed and wallowed in a muddy driveway puddle.

Meanwhile, a Yellow-bellied Sapsucker "telegraphed" repeatedly from a nearby telephone pole while, on the lawn beneath him, two chipper little Pine Siskins alighted on the heads of some mature dandelion blossoms, bending them to the ground. There they proceeded to peck out the ripe fruits until the released receptacles became, again, partly erect like tiny, almost bald (and very wet) grandmothers. Elsewhere on the luxuriant lawn three snowshoe hares and a cottontail rabbit demonstrated unexpected dietary preferences. These long-legged lopers spurned several varieties of clover and grass to select the dandelions and the plantains. The hollow, milky-juiced stems which had held the ripened dandelion blossoms upright (especially those already partly denuded by the Pine Siskins) were eaten first. These were nibbled off very close to the ground and the entire stem, base first, was then speedily "inhaled" almost as a tree limb is when it is fed into a mechanical chipping machine.

Next morning (June 14) no rain was falling, but sunrise was darkly obscured behind a thick overcast as our four 3-celled Potter traps were being set in the Munn driveway. A brisk, raw, easterly wind discouraged all thoughts of netting. When no grosbeaks had appeared by 0730 we returned to our cabin. A small flock settled near the cabin as we arrived. so we retrieved two of the traps, set them just beyond the steps of our front door. and baited them generously with sunflower seeds. Grosbeaks found the bait almost at once and by noon those two 3-celled traps had captured 45 males and four females plus two banded "foreign" males. Meanwhile, each of three attached females registered utter disdain of her swain's courting antics as, with body feathers fluffed, crown raised, tail erect, wing tips stiffly dragging, his parted beak pointed painfully upward, he squatted repeatedly before her. There was no contact nor combat between these smitten suitors, nor between them and the unattached males, but there was much feinting and bluffing. The males' stubby bodies, rounded almost spherically by fluffed body feathers. reminded your reporters of nothing more vividly than the inflated blowfish they used to haul from

the water of Long Island Sound. After noon there was so little activity near the cabin that we moved the traps back to the Munn driveway where they and two 5-meter EBBA nets combined to capture an additional 20 males and six females.

A chill. soaking drizzle postponed the start of our dawn trapping for a couple of hours on Saturday, June 15. When the precipitation had subsided we set two traps at the cabin and our other two traps and the two nets at the Munn driveway and scheduled our time so that the nets were never left unattended. Although a westerly breeze complicated the netting we banded 47 males and two females by noontime. One "foreign" male was also netted. Reports had reached us regarding concentrations of Evening Grosbeaks along gravel roads northwest of our location, so when the activity at our trapping sites became slow we shut up shop and spent the rest of the afternoon along such an unpaved roadway between Boiestown and Stanley. Roadmaps identify this route as Highway 625. It is a hilly stretch of gravel-top that had been salted abundantly during last winter's very heavy snows. Although we drove less than ten miles along the relatively uninhabited road we saw many hundreds of Evening Grosbeaks on its surface, along its edges, and in the mixture of deciduous and evergreen trees which border it on both sides. Largest flocks were near the bottom of hills where the greatest concentration of saltiness must have accumulated from the dissolved mineral having been washed down the slopes. Only infrequently was a female observed among the flocks of males. Although we drove cautiously it was extremely difficult to avoid striking the birds. They showed no fear of the approaching car until they arose from the road when it was almost too late. Frequent dead bodies were seen and wherever it was possible to stop safely each was examined. None wore a band. At one point a Raven flew along above the treetops carrying the body of a male Evening Grosbeak in its bill. The black scavenger was followed by a flock of the dead bird's protesting relatives.

A hot sun soon burned off the early cloudiness on Sunday, June 16, so we seemed destined to enjoy improved trapping conditions. The lightness of the westerly breeze made for favorable netting also, but the birds refused to cooperate. Only small groups were flying and those few remained high and flew erratically, tending toward the west. Our nets and traps were ready at dawn in the Munn driveway, but few grosbeaks settled near them. By 0900 only 21 had been captured - all males. Then a new complication developed when four boys and a girl, on bicycles, became unduly "interested" in what we were doing. We decided to move our traps and nets to Hughes' Brook hill on Highway 625 hoping that yesterday's grosbeaks would still be there. Shortly after midday the transfer was completed and the birds were present. The traps were baited generously and one net was installed as judiciously as possible. But we had not foreseen the weight of Sunday traffic along this road which, yesterday, we had travelled almost alone, nor could we have guessed that a few hours of sunshine would dry its unpaved surface so completely. Anyhow, by the time net and traps

*

6

7

PARKS - Evening Grosbeaks

were set the flocks of Evening Grosbeaks had already been driven violently from the road's gravel surface many more than a few times, and your authors felt that they were approaching blindness and suffocation from the dust raised by speeding motor vehicles. We withstood the discomfort long enough to learn that our sunflower seeds were not recognized as food by the birds that chanced to alight near them. Not even one seed was eaten; not even one bird entered a trap. A male and a female - apparently a mated pair - struck the net, however, and we captured the two most pitifully terrified Evening Grosbeaks imaginable. Removed from the meshes without injury, they continued to screech and scream, to struggle and to bite. It was evident that they were unnerved as the result of having been repeatedly scared by so many rushing automobiles. We soothed both birds back to reasonable normalcy before releasing them, together, into the relative safety of their unmechanized hinterland.

We delayed our own departure in order to study a flock of about 40 males beyond the bridge over narrow Hughes! Brook which was downhill from the spot where we were sitting in our parked car. The flock was well to the left side of the road, so any motor vehicle moving down the hill should have a clear passage by them. Just then a man in a topless convertible hurtled madly past us carrying with him a blinding. choking cloud of dust which almost completely obscured him and his vehicle as well as, momentarily. the authors. We have tried very hard to make ourselves believe that, briefly, the driver lost control of his car after crossing the bridge, for it swerved to the left and in far less time than it takes to read these words he had guided it directly through the middle of the area occupied by the flock we had been watching; then, without pause, back into his proper lane, and there was only the settling dust to remind us that he. or the flock of spectacular Evening Grosbeaks, had ever been there. When we were able to reach the spot the mangled body of a beautiful male spoke eloquently of a wanton case of human thoughtlessness as it lay. quivering slightly, among the tire tracks on the roadway.

The sun rose behind heavy clouds again on June 17. They soon dissolved as we watched our traps and nets with renewed anticipation. Apparently the birds did not share our enthusiasm, however, for only eight Evening Grosbeaks (all males) had stopped at the Munn driveway by 0950, while 25 males and two females had visited our cabin site. Momentarily a colorful picture was seen through a cabin window; it was almost as if three birds had been posed by an artist for a field guide-book illustration. An Evening Grosbeak and a Pine Grosbeak, both adult males in full breeding plumage, were most congenial as they beak-spooned gravel from the driveway almost head to head, while less than a foot above and between them, an adult male Rose-breasted Grosbeak perched on the lowest limb of a lilac bush. To improve our time we used this afternoon to check the grosbeak situation to the eastward of our headquarters. A 25-mile drive through Doaktown revealed only three males and one female along the highway, but each of our several stops permitted us to hear the voices of "our species" spread through the coniferous forest. East of Doaktown Evening Grosbeaks were especially plentiful in the trees. There, too, we found numerous spruce budworm webs and live larvae in the browned tips of such low boughs we were able to reach in the firs and spruces. One of our short pauses found us in a little-used woodsy lane. Scarcely had we come to a full stop when an adult male Yellow-bellied Sapsucker alighted on the cedar fence-post which stood less than ten feet outside the open window of our car. After a half-dozen vigorous, exploratory taps with his bill to test the resonant qualities of the wood the brilliantly-plumaged bird proceeded into a resounding rendition of his species' distinctive message. Three times the staccato notes of the "sapsucker telegraph" echoed through the forest, then he paused and cocked a quizzical eye at his admiring audience. He seemed almost to be awaiting the applause that his expert demonstration most richly deserved.

Tuesday, June 18, brought rain - and we mean RAIN. The morning featured a downpour which started during the previous night and continued almost unabated until 1300. Thereafter we donned rubber boots and set our traps on gravel islands among the puddles in the driveway before the cabin door. Birds began to arrive almost at once and by nightfall 26 males and two females had been banded.

Just as fresh run salmon hurry up the Miramichi after a smart rainfall, so the Evening Grosbeaks stretched their wings as dawn on June 19 brought the only unclouded sunrise of our week's stay - and the first significant renewal of past seasons' grosbeak migration was suddenly upon us. To our embarrassment it caught us with our ambition down and we lost a precious half hour at dawn before we could prepare our equipment for action in the Munn driveway. During this delay a sunrise flock of at least 100 settled where our traps should have been and then took off to westward in the first demonstration we had seen this spring of the typical migratory movement that had been such a prominent feature of our previous visits. Other smaller groups followed this same pattern and by 0930, when a fresh westerly breeze made further netting impossible. our nets had taken 38 males and a female while nine males were being trapped. The flight collapsed when the breeze stiffened, so we made use of the lull to recheck conditions along Highway 625. There the recent rains had settled the dust but fewer Evening Grosbeaks were seen than when we had made our first inspection three days ago. On that occasion we had baited two locations with marked piles of sunflower seeds. Every seed that we had left near the Hughes' Brook bridge had been shucked although not even one Evening Grosbeak was seen there today. Surprisingly, near Stewart's Brook bridge 40 males, dispersed among the piles of sunflower seeds we had left there on Sunday, were counted yet a careful examination of the seeds revealed that all of them remained intact and unshucked. Back at our cabin as supportime approached several grosbeaks showed up for an evening snack just as rain started to fall so heavily that trapping was out of the question. Later. as we lay awake listening to the rainfall, our sorrowfully sodden enthusiasm became soggier and soggier.

8

9

EBBA NEWS - Vol. 32, No. 1

When the rain continued next morning - June 20 - and, again, we found only an expanse of muddy water there our gravel-topped driveway should have been, we decided that the time had come to compose a report of our limited successes. While we were completing our schedules (in duplicate) for the Canadian Wildlife Service eight waterlogged male Evening Grosbeaks and a female attempted to obtain something to eat from the driveway, but they were obliged to content themselves with perching on the dripping overhead telephone wires while they looked down at the submerged seeds. The rain finally stopped at about 1500 and within minutes small groups of birds came to feed as the surface water rapidly receded. There was no need to reset any of the traps, for the envelope had been sealed upon our completed schedules.

Next morning (June 21) at 0730, Evening Grosbeaks were calling among the trees in the forest as we climbed into our car for the drive back to our summer station in Maine. We turned the switch that activated the windshield wiper - and splashed along through another downpour.

* * *

To this point in the report we have permitted our readers to examine our personal diary in order to share our frustrations as well as the satisfying fruits of our experience. Let us now summarize our accomplishments in the two tables which follow immediately. Then we shall close this paper with a brief discussion of several pertinent topics.

TABLE I. EVENING GROSBEAKS CAPTURED AT ASTLE, N.B.

Date (1968) June	<u>M</u>	_ <u>F</u>	Daily Total	Returns	Foreign Retraps	Repeats
14	65	10	75	-	2	2
15	47	2	49	-	1	2
16	22	1	23	-	-	2
17	14	-	14	-	-	2
18	26	2	28	-	~	6
19	47	1	48	-	-	-
Totals	221	16	237*	-	3	14**

*Four 3-celled Potter traps and two 5-meter EBBA nets (Type W) were employed to capture these birds; 154 were trapped, and 83 were netted.

**Fourteen different individuals each repeated one time only.

PARKS - Evening Grosbeaks

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

R			Trapped & Released (1968)	his Bird <u>By</u>	W as B an <u>At</u>	ded: <u>Date</u>
63-130328	ASY	М	June 14	nas. A. Neel Say	brook, Pa.	11/30/63
69-111929	ASY	М	June 15	P. Potter Lin	coln, Maine	5/4/66
70-120198	AHY	Μ	June 14	W. Collins Swi	ftwater, Pa.	3/5/68

All three of these "foreign retraps" were captured in nets.

Discussion

Sex Ratio. The result of our banding suggests a male preponderance of 14 to 1 over females. This numerical relation between the sexes agrees quite favorably with our flock counts. The prevalence of males increased during the progress of our study because of a decrease of females in the flocks rather than because of any reinforcement of the male population.

<u>Migratory Movement</u>. Evidence of a migratory movement which had been so strikingly apparent on the occasion of some of our previous visits was a very minor feature of this spring's experience at Astle. Most of the birds remained dispersed through the forest during the short duration of our rather waterlogged study and evidence of any migratory trend was noted on only two days. Although only 14 of our birds repeated, four of these were recaptured four days after they had been banded, thereby indicating no great haste to depart from the area.

<u>Highway Mortality</u>. This same tendency of the birds to remain dispersed through the forest contributed measurably to the low mortality of Evening Grosbeaks along heavily travelled Highway 8. It seems, however, that an equally important reason for this low mortality was the shift to the northwestward which had occurred in the local center of population concentration. Although this shift in location was a matter of not more than about ten miles it meant that another highway which carried much lighter vehicular traffic became chiefly involved. So the pathetic picture of tortured grosbeak bodies which had typified Highway 8 during some past springtimes was spread, instead, along gravel-topped, backwoods Highway 625 this spring.

<u>Physical Condition</u>. The Evening Grosbeaks we handled at Astle were in excellent physical condition: plump, fully plumaged, and free from discernible ectoparasites. One ASY male had no left foot, but this bird moved about on the ground without evident handicap. The tarsus stump terminated in a calloused bulge. To be completely truthful it must be reported that

11

one SY male showed new retrices which were not more than one-fourth regrown. No bird sustained visible injury while being captured and banded; all flew normally when released.

About Pesticide Spraying. Liaison between our study and the forestry spraying program was lost when Mr. D.R. MacDonald left the New Brunswick Forestry Research Laboratory at Fredericton to head the entomology section of a similar laboratory at Victoria in the far western province of British Columbia. Another helpful contact was also lost when Dr. C.D. Fowle's Taxis Air Strip headquarters moved eastward to the Dunphy Air Strip near Blackville. Lacking these sources of information we are able only to report that no spraying occurred within sight or hearing of our sphere of operations. We understand that only spraving of an experimental nature with organophosphate insecticides was planned for this year. We have no report to offer regarding the extent to which this plan was carried out nor with regard to any conclusions which may have been drawn. As far as the future of the Evening Grosbeak in New Brunswick is concerned, however, the prospect seems bright. There is a large breeding population of the birds at present in the spruce budworm infested areas and. at least for the near future, the budworm occurs in sufficient numbers to supply the grosbeaks' needs without harming the forests so seriously as to suggest a reason for increased spraying. But let us remember that even serious budworm concentrations sometimes suddenly collapse and. on the other hand. endemic conditions have been known to explode into epidemics which call for drastic spray programs. So let there be no prediction emanating from this typewriter! Should the favorable picture develop as presently seems possible we must steel ourselves for the inevitable increased carnage of this spectacular species on the highways.

Other Species Captured. Since persistent wet weather restricted very severely the amount of time our nets were used the number of extra-curricular species we captured was insignificant. We captured and released, without bands, the following: Purple Finch, 20; Common Grackle, 10; Brownheaded Cowbird, 3; and one each of: Pine Siskin, Savannah Sparrow, Veery and English Sparrow. Only the grackles had any appreciable effect on our study. They were far more prevalent than this list suggests. Their stubborn aggressiveness in the trapping area resulted in the flushing of many Evening Grosbeaks which might otherwise have become banded statistics.

<u>A Word of Appreciation</u>. As was the case during each of our previous visits north of our nation's northern border, exemplary courtesy and cooperation has, again, been extended to us by Canadian Wildlife Service personnel. We have, also, received prompt and efficient cooperation from chief Earl B. Baysinger and his personnel at the U.S. Bird Banding Laboratory. Mr. & Mrs. Joseph Munn and their grandsons, Brian and Reginald, again welcomed us to the environs of their home and restricted their own activities in order to improve the chances of our study's success. This time we are indebted, also, to Mr. and Mrs. Stanley Stewart, proprietors of our cabin headquarters, for permitting us to carry on our trapping program there when so many members of our unpredictable species chose the Stewart driveway as their preferred place of assembly. To these good people and to all others, unnamed, who contributed in any way to the completion of this study: a hearty "Thank you!".

<u>Summary</u>. Our fourth annual banding study of Evening Grosbeaks at and near Astle in the Miramichi watershed of central New Brunswick occurred during the period from June 13 to 20, 1968. Persistent rainfall complicated our work very seriously. The grosbeaks were widely dispersed throughout the forest as a relatively stable population with only an insignificant migratory trend. 237 Evening Grosbeaks were banded; males predominated 14 to 1. Three "foreign" males were also captured. Highway mortality was much greater along gravel roads than on the more heavily travelled blacktop highway in the region we surveyed. No pesticide spraying occurred in our study area.

99 Warrenton Ave., Hartford, Conn. 06105



Evening Grosbeak Photo by Mrs. Bradley Fisk

JOSSELYN VAN TYNE MEMORIAL FUND

The attention of all students of birds is invited to the forthcoming awards from the Josselyn Van Tyne Memorial Fund in support of research projects. See <u>The Auk</u>, January 1969, on how to apply, or write to Dr. Paul H. Baldwin, Zoology Department, Colorado State University, Fort Collins, Colorado 80521. (Dr. Baldwin is Chairman of the Research Committee of the American Ornithologists Union. -Ed.)