

## THREE YEARS OF OPERATION RECOVERY AT MONHEGAN

By Albert Schnitzer

(Pictures: Courtesy of F. E. Cousins, Guy Gannett Publishing Co., Portland, Maine - Captions by Eva Schnitzer)

During the past three autumns we have worked on a banding project at Monhegan Island, Maine. This paper is a commentary on the work done, consisting of a brief history of the project, a tabulation of the banding figures obtained thus far, a statement of the problems which we hoped might be answered by our work, an examination of our data with respect to these problems, and an evaluation of the results achieved.

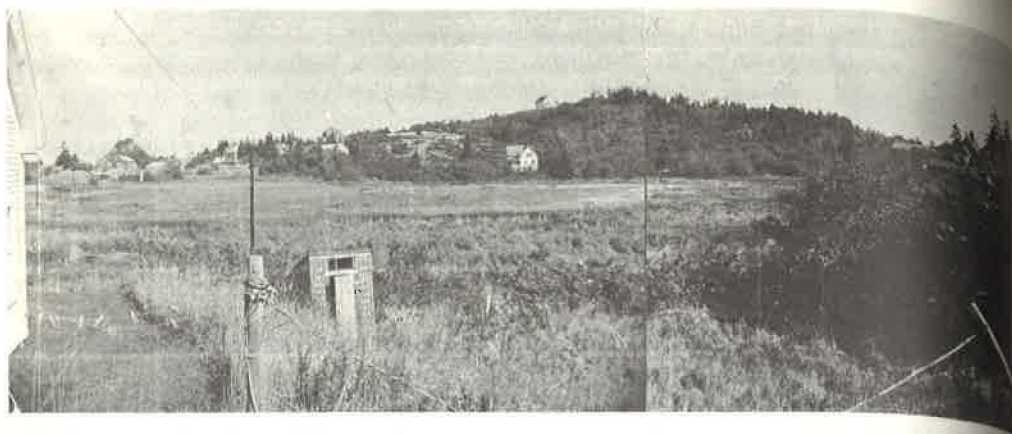
Any casual visitor to this island cannot fail to notice the profusion of birds. After our interest was aroused, we returned in the fall of 1957 to make a comparison study of the current fall migrants with those listed nineteen years earlier by other observers. During this study we came to feel that Monhegan was strategically located to apply banding techniques on migration problems since it stands isolated between the long curve of Canada's eastern provinces and the coast of New England. If birds did funnel off the southern tip of Nova Scotia, and if they then headed westward, there seemed an excellent chance that they would seek a landfall on the obtrusive headlands of Monhegan.

It was not until 1960, however, that we were able to commence banding at Monhegan. Originally we had set our goal at 500 birds. Once started we raised our sights to 1000, a figure which seemed fantastically beyond reach. Our experiences, both fun and trouble, are chronicled in "Operation Recovery at Monhegan Island, Maine, 1960" which appeared in EBBA News of March, 1961.

Our second year's work is described in "The 1961 Fall Migration at Monhegan, Maine" which appears in the EBBA News issue of May-June 1962. Since we had only one week to give to the project that year, we worked diligently, even driving all night from Mountainside to Port Clyde in order to save one day; and setting up our nets in the meadow at Monhegan immediately upon our arrival, despite our weariness and a cold rain.

Fortunately the weather moderated, so that in our short stay of only six days we listed 755 banded birds. The most significant fact that developed was that we had not a single return. In our article we tried to analyze the possible reasons for the absence of returns, but it was evident that further fall banding projects were necessary before answers could be found.

It was for this reason, the necessity to obtain corroborative or additional data, that we embarked on the third year's work, in 1962. Although 21 days were spent on the island this time, we were able to net only 10 days. Lashing rain storms, a hurricane, and gale winds prevented continuous operation. We banded a mere 759 birds.



(above) The Meadow - banding site most excellent.

(below left) We tramped down the meadow grasses and cut a swath about 200 feet long and several feet wide. Here we set up a net lane, fairly deep into the wet meadow.

(below right) Mornings were a bit chilly.



Following is a tabulation of all the birds we banded at Monhegan. The figures are summarized by totals for each year.

BIRDS BANDED AT MONHEGAN

Species	Totals During			3 yr. Total	Frequency
	9/19-10/10 1960	10/4-10/9 1961	9/24-10/10 1962		
Sharp-shinned Hawk	2	1	-	3	42
Yellow-billed Cuckoo	-	1	-	1	57
Black-billed Cuckoo	1	1	-	4	40
Yellow-shafted Flicker	8	1	-	9	28
Yellow-bellied Sapsucker	5	9	5	19	19
Downy Woodpecker	17	14	16	47	11
Western Kingbird	-	3	-	3	43
Eastern Phoebe	17	-	7	24	15
Yellow-bellied Flycatcher	1	-	-	1	58
Empidonax	3	1	5	9	29
Eastern Wood Pewee	-	1	1	2	47
Blue Jay	1	-	-	1	59
Black-capped Chickadee	6	1	3	10	26
White-breasted Nuthatch	-	4	-	4	41
Red-breasted Nuthatch	-	9	-	9	30
Brown Creeper	36	13	12	61	10
Catbird	8	-	-	8	32
Brown Thrasher	1	1	-	2	48
Robin	2	1	-	3	44
Swainson's Thrush	3	-	-	3	45
Golden-crowned Kinglet	2	6	3	11	25
Ruby-crowned Kinglet	22	12	13	47	12
Cedar Waxwing	-	1	-	1	60
Solitary Vireo	3	8	9	20	18
Red-eyed Vireo	13	5	5	23	16
Black-and-white Warbler	1	-	1	2	49
Tennessee Warbler	1	-	-	1	61
Orange-crowned Warbler	1	-	-	1	62
Nashville Warbler	5	3	5	13	21
Parula Warbler	1	1	-	2	50
Yellow Warbler	-	-	1	1	63
Magnolia Warbler	2	1	2	5	37
Cape May Warbler	-	1	1	2	51
Black-thr. Blue Warbler	4	-	1	5	36
Myrtle Warbler	147	262	92	501	1



Species	Totals During		9/24-10/10 1962	3 yr. Total	Frequ- ency
	9/19-10/10 1960	10/4-10/9 1961			
Black-thr. Green Warbler	4	1	3	8	
Chestnut-sided Warbler	1	-	-	1	33
Bay-breasted Warbler	1	1	-	2	64
Blackpoll Warbler	53	11	11	75	52
Prairie Warbler	1	-	-	1	9
Palm Warbler	45	15	26	86	65
Ovenbird	1	-	-	1	6
Northern Waterthrush	1	-	-	1	66
Connecticut Warbler	1	-	-	1	67
Yellowthroat	4	3	14	21	68
Yellow-breasted Chat	5	2	-	7	17
Wilson's Warbler	-	-	3	3	34
American Redstart	4	1	1	6	46
Bobolink	-	1	1	2	35
Baltimore Oriole	4	3	2	9	53
Rusty Blackbird	3	1	9	13	31
Brown-headed Cowbird	8	2	-	10	22
Scarlet Tanager	2	-	-	2	27
Rose-breasted Grpsbeak	1	-	-	1	54
Blue Grosbeak	-	-	1	1	69
Indigo Bunting	2	-	3	5	70
Dickcissel	5	-	7	12	38
Purple Finch	-	11	-	11	23
American Goldfinch	58	2	22	82	24
Rufous-sided Towhee	2	-	-	2	7
Savannah Sparrow	61	111	223	395	55
Grasshopper Sparrow	-	-	2	2	3
Vesper Sparrow	5	-	-	5	56
Slate-colored Junco	226	58	63	347	39
Chipping Sparrow	9	3	15	27	4
White-crowned Sparrow	24	1	8	33	13
White-throated Sparrow	53	40	18	111	5
Lincoln's Sparrow	1	-	13	14	20
Swamp Sparrow	19	31	31	81	8
Song Sparrow	244	94	101	439	2
Total Individuals	1161	755	759	2675	
Total Species	57	45	40	70	
Returns	0	0	1	1	
Recoveries	0	1	0	1	

Frequency Rating in the above tabulation means the position in a listing of the species in the order of the total banded during the three years. Birds with the same score are numbered in their taxonomic order.

The purposes of a banding station and the problems which suggest themselves to banders may include such matters as plumage and color, dimensions, subspeciation, determination of age and sex criteria, behavior, etc. Because of Monhegan's unique location, to us the most pertinent problems were:

1. What migrants visit Monhegan? Do land birds fly there directly, or do they reach it by chance while following some primary direction? What pelagic and open ocean migrants are attracted to it? What wanderers or vagrants or accidentals, lost or strayed out on the open sea, would chance upon this haven?
2. Do individuals migrate at the same time each year?
3. Is the path of individual birds identical from year to year?

With respect to the migrants that reach or pass by Monhegan, it will be observed that we list 70 species. The frequency column shows that eighteen of these number 20 or more individuals, and thirty include 10 or more individuals. One might conclude, therefore, that most of the remaining forty species listed are not regular migrants. Such a conclusion would be false, as our banding totals simply do not mirror the true facts. For example, we banded only one Cedar Waxwing so that it is 60th in the frequency rating. In our 1957 fall count, however, before we began banding, the Waxwing was the most numerous bird. Another example: the Flicker is at number 28 whereas the Dickcissel is at number 23. Nevertheless any observer on the scene would immediately become aware that the Flicker is one of the most common birds on the island, whereas none but a careful searcher would notice any Dickcissels.

Further, there are many species which we feel to be regular migrants which we have never netted at all. These include Nighthawk, Osprey, Cormorant, Merlin and others, all of which we sight quite uniformly.

It is apparent that competent observers with binoculars might obtain truer figures than netters. This is especially so in connection with the problem of the flight of land birds across the sea. We cannot be really certain whether our birds reach us from the open sea to the east or whether they drift out to us from the mainland to the west and north. If netters were to set up their nets on the headlands on the east side of the island, and if they kept accurate records as to whether the birds struck on the seaward side or the land side, a statistical approach to this problem might be possible. Unfortunately, we have never had enough netters to try such an experiment. If we had more help, rather than use them as netters, we believe it would be more fruitful to station them around the periphery of the island at certain intervals to record systematically the birds that reach the island, noting the time, direction, altitude of flight, and species.



Concerning pelagic birds, in addition to various gulls and cormorants, it is commonplace for us to see gannets, shearwaters and guillemots off the island. Once we had a phalarope, a sick bird which died despite our efforts to keep it alive. Local residents have described to us a flock of thousands of phalaropes dabbling on the surface of the sea close by.

When it comes to the rarity, a bird in the hand is certainly worth more than the one in the bush. If we had not actually handled them, we might hesitate to claim a Western Kingbird, or an Orange-crowned Warbler, or a Blue Grosbeak, or a Grasshopper Sparrow. In Maine these birds are apparently away off course. So much of our time is spent with our heads buried in our nets, so to speak, that we suspect many opportunities have been lost to record unusual species.

The matters just mentioned can be handled as readily with a binocular as with a net. But problems concerning the identity of an individual bird require that the bird either return or be recovered.

Nothing rigorous can be deduced from only one recovery but for what it is worth and because all recoveries are exciting, let us mention that we have had a recovery: a Myrtle Warbler banded on October 9, 1961 at Monhegan was recovered on March 15, 1962 in Mississippi at grid coordinates 313, 0900. Since Myrtle Warblers stand first in our frequency tabulation, we are more likely to have a Myrtle recovered than any other species. Still, it would take many recoveries to determine whether a flock of Myrtles seen at Monhegan retains its cohesiveness all year long, from breeding range to wintering range.

The most puzzling problems are those which arise as a consequence of the small number of returns taken thus far.

As mentioned earlier, during 1961 we had not a single return. Readers of our second EBBA News article will recall that we hazarded three guesses for the absence of returns: (1) variation in timing, (2) variation in the migration path, and (3) the inadequacy of our sample.

How do these guesses stand in the light of the third year of banding? Are they still guesses, or do the facts thus far gathered begin to give definite information?

With respect to timing, it was possible that during the second year we did not get a return because the birds netted the previous year had already passed by or had not yet arrived. Three years of work, however, might reasonably be expected to produce two time schedules that overlap: either the first with the second, or the second with the third, or the first with the third. Therefore, during the third year we hoped to record a fair number of returns, provided factors other than time coincidence permitted and were favorable.

(at right) To the right, the tallest, most important tree in the meadow. Our net beneath it took woodpeckers, kinglets, creepers, vireos - a variety of birds that made for the tree upon rising from the meadow grasses.

(below left) One of our disciples - the island children were our friends and helpers.

(below right) Albert banded, recorded, and took notes. I netted and acted as courier.





Actually we had only one return during our third year. Even that one, a Chickadee at a feeder, was probably a local resident rather than a migrant.

This absence of returns forces us to conclude that factors other than a time variance must be considered. Thus we are led to the possibility that the migration route of the individuals we banded will not take them to Monhegan more than once, that is that no two migration paths are identical. Now this word will involve us in hair splitting.

Suppose most of the birds that reach Monhegan hop off from the southern portion of Nova Scotia. (Of course, there is no assurance of this even though we have seen many individuals and flocks arriving from the east or northeast, across the sea.) Even if they started from a single point, by the time they traveled almost 200 miles, the distance to Monhegan, the front could fan out considerably. How narrow must the path traversed from year to year be in order to qualify as being identical? Is it sufficient if it is narrow enough to see Monhegan but too far to tempt them to steer toward it?

But suppose banded individuals do deviate from their primary direction in order to pass directly over Monhegan, and suppose that each year flying conditions are identical so that these individuals are impelled to land on Monhegan to rest and feed. They would have to forage within the same acre or two where our nets were set both years or we would miss them the second time. Or, they might be part of that great majority of the birds that bounce off our nets, or jump over them, or arrive on a day when our nets are furled for some reason. We would still fail to get a return no matter how precisely identical the path might be from year to year.

Now we are, perhaps, ready to attempt an evaluation of our work.

It has not yielded a single definitive answer to the problems that puzzled us. It has, in fact, created certain data which must be interpreted properly in order not to be misleading.

On the other hand it has shown the scope of the problem by demonstrating that there is needed a great many more birds banded in many locations on the island, at various times, in various habitats, under varying weather conditions; and that this data would then have to be sorted and worked over properly.

Our work has also shown that a project such as this could benefit from the cooperation of persons who would act as careful observers, even if they were unable to assist at netting and banding. In fact, in certain respects such observations are more needed than additional banding records.

A fair start toward the development of adequate data has already been made. The local population has become sympathetic and interested. Qualified banders and ornithologists have become aware that the island

may merit their best efforts. From all this sufficient data must inevitably accumulate to find answers to the questions we posed and to prove or disprove some of the guesses we made.

155 Wild Hedges Lane, Mountainside, New Jersey.



-- The Schnitzers are returning to Monhegan for a fourth year of banding for about two weeks commencing Labor Day, 1963. Persons interested in helping with the netting or as observers are invited to join them in this challenging and worthwhile project.



#### HAWKS HIGH IN THE ANDES

From a letter by Frank P. Frazier, Jr., EBBA News' Associate Editor

Frank writes from Peru that he spent four days in late July on a trip in his new red Volkswagen to the Callejón de Huaylas, a hundred-mile-long valley in the Andes, well north of Lima. Among the peaks flanking this valley is Huascarán, Peru's highest mountain. Frank drove through a pass around 13,000 feet high, with Huascarán some two miles away and nearly two miles above him. He writes:

"Over the high grassland, I saw a big black and white hawk (*Phalco boenus albrogularis*) (same as the ones we first saw and identified when you were here), and then a couple more, and stopped to watch them; then I saw a couple more sitting on stones, then about five in the air. I began to look around more carefully, and realized that the neighborhood was full of them! I fired a shot into the air with my pistol, and the air was full of these hawks - an amazing sight. As far as I could tell, all were of this species - many were dark brown, some blackish, presumably gradations of immature plumage, but all were the same size and shape, and together; only three other species of this type that I know of here, and none of the birds were these. I must report this to Maria Koepcke, since a gathering of perhaps 50 hawks has to be interesting. . . ."

Colmena Derecha 208, Lima, Peru.