

OPERATION RECOVERY  
AT MONHEGAN ISLAND, MAINE, 1960  
By Albert Schnitzer

Any vessel which sails along the coast between Canada and the U.S., or which crosses the ocean from or to New England must pass fairly close to Monhegan Island. Since the island towers out of the sea to a precipitous 160 feet, voyagers must almost surely notice it. Therefore Monhegan has been mentioned in the logs of explorers and travelers since the very earliest days.

Leif Ericson may have landed there, for on its tiny sister island of Manana can be found certain marks on a great rock which appear to be Norse runes. There followed a whole succession of explorers which may have included the Cabots and Verrazano, and which certainly did include John Smith. During colonial days, sailing vessels regularly stopped there for fresh water, fish and to gather berries. This practice persisted through the early days of steam navigation. Even today pilots leave from Monhegan to board vessels bound for "down-east" harbors.

It is possible that avian travelers are influenced by some of the same factors which have made Monhegan figure in the affairs of men, for it stands, isolated but prominent, directly across the air route from Nova Scotia and the Maritime Provinces to Maine. There still exists the same abundance of berries which enticed the Indians and sailing men; and there is plenty of sweet water and cover where migrants may rest.

Monhegan is located at latitude 43 degrees 50 minutes north, longitude 69 degrees 20 minutes west, about 10 miles from the nearest point of mainland to the northwest, with Port Clyde about 15 miles to the north, Boothbay Harbor a bit farther to the west, and the southern tip of Nova Scotia far away to the east, some 180 miles across the outer waters of the Bay of Fundy. Approximately  $1\frac{1}{2}$  miles long by  $\frac{1}{2}$  mile wide, the island covers roughly 800 acres. A fuller description of the island, including some of our observations especially during the fall of 1957, appears in our article "The Fall Migration at Monhegan" in the Maine Field Naturalist of April 1960.

During the tourist season, Monhegan is visited by thousands of vacationers, but after Labor Day the population drops abruptly to the normal 50 some odd. Although it has never seemed excessively crowded to us even during the summer, we like it best in the fall when it again becomes a quiet community of lobster fishermen. Originally we selected Monhegan for a holiday simply because it seemed the most remote island which could be reached by ferry. It was not until later that we became aware of its spectacular beauty and wealth of birds.

After we became acquainted with and participated in Operation Recovery, Monhegan appeared to us to be most strategically located to be included in

this program. It appeared that data collected there might be particularly pertinent to answer some of the puzzles that intrigue migration students everywhere, such as:

- Are there fixed migration routes for each species?
- How are these routes affected, if at all, by physical barriers?
- To what extent is the hereditary and instinctive route altered by immediate and variable causes such as weather and wind?
- Do mature birds vary the hereditary route to conform with previous experience? Do such experienced birds lead immatures? Do families remain intact during migration?
- What stimuli launch flights? Are these stimuli physiologically cyclic only, or may they be external such as weather, light, etc.
- What is the relation between rarities and extension of range?

Obviously, these questions are general and not confined only to Monhegan; but, it did seem to us that some variables which serve to cloud sets of observations on the mainland might be less intrusive on a small island. Further, its location athwart possible migration paths recommended it. But above all, was the likelihood of readily amassing large numbers of banding records and an excellent prospect of a good percentage of returns in subsequent seasons.

Consequently, we determined that, if possible, we would set up a banding project on the island. It was not at all certain that permission from the local people would be obtainable. Communities in much more sophisticated metropolitan areas have reacted negatively to banding. The first requirement was to obtain permission to band from the island authorities.

The local government of the Plantation, as it is designated, is a true democracy in which almost the entire population participates directly. I knew us personally from previous visits, but we felt we were best known to Mrs. Marion Cundy at whose cottage we had stayed on previous visits. Therefore, we wrote to her, enclosing our article from the Maine Field Naturalist and some publicity on Operation Recovery at Island Beach which had appeared in the Newark Evening News. Almost immediately came Mrs. Cundy's favorable response, granting permission from Mrs. Virginia Davis, the first selectman. In a larger and less democratic community, we might have had weeks of correspondence before obtaining action.

A state permit to band was also necessary, but this too came promptly and with very little red tape. Readers who may wish to apply for a Maine banding license are referred to Mr. W. R. DeGarmo, Chief, Game Division, Department of Inland Fisheries and Game, Augusta, Maine.

The roads all the way to Port Clyde are excellent. From May to October the mail boat runs to Monhegan daily except Sunday. It leaves at 11 A.M. Cars may be parked outdoors at Port Clyde for a small fee. During July and August there is also a daily excursion boat to Monhegan from Boothbay Harbor.

On the island, transportation is by shank's mare. We have often considered a bicycle, for there is about a mile of road, but much of this is well calculated to break the frame of a bike, let alone its rider's spine. Because of the need of so much walking, it is well to take along many more nets and poles than may be manned at one time. One may thus change location back and forth by merely furling and tying the unused nets without the necessity of lugging heavy equipment on foot. A portable arrangement of note books, bands, and other supplies is essential.

Fortunately, the greatest concentration of birds occurs on the western side of the island, the village side, where our lodging and meals were necessarily located. This, however, posed the problem of working close to homes where we might be unwanted trespassers, and certainly of operating under constant scrutiny of passers-by.

Our fears on the first were quickly resolved. The Odum brothers who run the Monhegan Island Store gave us full permission to band at their ice pond which is at the north edge of the village. They also invited us to band at the store which is in the midst of the village. Soon, others too invited us to band on their property, among whom were the Parkers and the Bernsteins who maintain feeding stations. We were also permitted to band by the Slatons and Mrs. Cundy, on the beach near the Henley Days, and behind the Island Inn. Best banding was at the edge of town-owned meadow which rims the village to the east. Here we set up headquarters behind the "1784 house" as we called it, where we worked with the kind permission of Mrs. Pierce and Henley Day.

We mention these places not only to acknowledge the indulgence of the owners, but also to suggest to others who may wish to band at Monhegan Island locations where good results may be obtained. We must say, however, that we believe we'd have been permitted to band, upon request, by any of the islanders. All of them took a lively interest in our work, greeted us cheerfully, kidded us good naturedly, and generally made us feel welcome.

Working under the eye of the public was at times a trial, even though we have always advocated candor rather than secrecy, where netting is concerned, in order to educate the public rather than to foster suspicion.

This philosophy did not prevent me from getting stage fright one day when I was working on a thoroughly enmeshed and highly vocal sapsucker just as a group of twittery ladies who had taken the mail boat for a round-trip sail decided to walk up the road for a constitutional while the boat was being unloaded. I didn't even have my scissors with me with which to cut myself out of my dilemma. Their proffer of assistance, en masse, did not lessen my discomfiture.

On another occasion, a group of people were standing near one of our nets located by some shrubs when a flock of goldfinches, hotly pursued by  
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U. S. Fish & Wildlife Service Operation Recovery Bird Banding Project, 1960

Cooperators: Eva F. and Albert Schnitzer, Mountinside, N. J.

MONHEGAN ISLAND, MAINE. SEPTEMBER 19 to OCTOBER 10, 1960

Numerical Summary of Birds Banded

	9/19	9/21	9/22	9/23	9/24	9/25	9/26	9/27	9/28	9/29	9/30
Sharp-shinned Hawk			1					1			
Black-billed Cuckoo		1	2								
Yellow-shafted Flicker		1	1								
Yellow-bellied Sapsucker			1								
Downy Woodpecker			2								
Eastern Phoebe		1									
Yellow-bellied Flycatcher			2								
Empidonax sp.											
Blue Jay			1		1						
Black-capped Chickadee			2								
Brown Creeper			3			1					
Catbird	3										
Brown Thrasher											
Robin											
Swainson's Thrush			1								
Golden-crowned Kinglet											
Ruby-crowned Kinglet											
Solitary vireo	1		1		1						
Red-eyed Vireo			1								
Black-&-white Warbler			1								
Tennessee Warbler											
Orange-crowned Warbler		1									
Nashville Warbler											
Parula Warbler											
Magnolia Warbler											
Black-throated Green Warbler											
Black-throated Blue Warbler											
Blue Warbler											
Palm Warbler											
Ovenbird											
Northern Waterthrush						1					
Connecticut Warbler											
Yellowthroat			1								
Yellow-breasted Chat											
American Redstart	1	1									1
Baltimore Oriole						1					
Rusty Blackbird		2	1								
Cowbird				7	1						
Scarlet Tanager						1					
Rose-breasted Grosbeak											
Indigo Bunting											
Dickcissel									1		
American Goldfinch	1	3	5			18	2		15		
Rufous-sided Towhee											
Savannah Sparrow			2					2	3	2	
Vesper Sparrow											
Slate-colored Junco			4			2	1		1	3	
Chipping Sparrow							1		2		
White-crowned Sparrow							1				
White-throated Sparrow	3	2	18	1		6					
Lincoln's Sparrow											
Swamp Sparrow											3
Song Sparrow	3	3	5	6	6	1	5	1	4	5	2
Daily Total Individuals	17	17	62	17	8	35	12	2	7	26	13
Daily Total Species	9	9	23	6	3	9	7	2	3	5	7
Daily Net Hours	21	38	49	10	4	41	25	2	13	10	
Daily Maximum Nets	4	6	6	5	2	7	4	1	2	5	4

Birds per net hour .81 .45 1.26 1.70 2.00 1.85 .48 1.00 3.50 2.00 1.30

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Cooperators: Eva F. and Albert Schmitzer, Mountainside, N. J.

MONHEGAN ISLAND, MAINE. SEPTEMBER 19 to OCTOBER 10, 1960

## Numerical Summary of Birds Banded

	10/1	10/2	10/3	10/4	10/5	10/6	10/7	10/8	10/9	10/10	Total
Sharp-shinned Hawk								1	1		2
Black-billed Cuckoo								1			1
Yellow-shafted Flicker			1	1				1			3
Yellow-bellied Sapsucker			1	1			2	1	2	1	7
Downy Woodpecker	2	2	1	3				3	2	3	17
Eastern Phoebe	1			1	5						7
Yellow-bellied Flycatcher			1								1
Empidonax sp.							1				1
Blue Jay			2						1		3
Black-capped Chickadee			2	4	10		2	2	6	8	36
Brown Creeper			2								2
Catbird			1								1
Brown Thrasher								1			1
Robin									1	1	2
Swainson's Thrush											3
Golden-crowned Kinglet					2						2
Ruby-crowned Kinglet	1	1		2	3		1	1	4	10	22
Solitary vireo		1			1					1	3
Red-eyed Vireo	4	2	2	1	1						13
Black-&-white Warbler											1
Tennessee Warbler											1
Orange-crowned Warbler								2			2
Nashville Warbler			3								3
Parula Warbler		1									1
Magnolia Warbler		1									1
Black-throated Blue W.		1									1
Black-throated Green W.		1									1
Black-chinned Warbler		1									1
Blackpoll Warbler	37	3	1	5			2		1		53
Prairie Warbler			1	1							2
Palm Warbler	21	1	4	4	2		7	1	5	2	45
Ovenbird			1								1
Northern Waterthrush											1
Connecticut Warbler									1		1
Yellowthroat			1		1		1				4
Yellow-breasted Chat			1						4		5
American Redstart		1									1
Baltimore Oriole				1				2			4
Rusty Blackbird											3
Cowbird											8
Scarlet Tanager									1		1
Rose-breasted Grosbeak			1								1
Indigo Bunting		1					1				2
Dickcissel	1							3			5
American Goldfinch	6	3			4				1	1	58
Rufous-sided Towhee					1						2
Savannah Sparrow	6	5		2	19		1	2	2	17	61
Vesper Sparrow										3	3
Slate-Colored Junco	29	10	5	42	9		5	29	59	27	226
Chipping Sparrow			1	1				1	1	1	5
White-crowned Sparrow				2			1	1	5	14	24
White-throated Sparrow	2		2	1	5		2		2	9	53
Lincoln's Sparrow										1	1
Swamp Sparrow	2	1		1	3			3	3	3	19
Song Sparrow	12	9		15	20	1	10	34	35	67	244
Daily Total Individuals	127	93	45	95	110	2	37	103	152	181	1161
Daily Total Species	15	16	18	19	17	2	13	19	23	23	57
Daily Net Hours	57	40	47	52	54	2	44	70	74	39	694
Daily Maximum Nets	6	7	9	9	9	3	9	8	9	6	9

Birds per net hour

2.23 2.33 .96 1.83 2.04 1.00 .84 1.47 2.05 4.64 1.67

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a sharp-shinned hawk, plunged toward the protective shrubbery. In a flash our net sagged under the load of frantic goldfinches several of which were within talon and beak reach of the momentarily dazed hawk. We'd been away to another net but happened back just in time to see the strike. The hawk was disengaged and freed within seconds, before any casualties had occurred. We then stuffed 17 goldfinches into our gathering cages. We shudder to think what opinion might have been formed of our project if we had been a minute later.

Particularly pleasant were our experiences with the school children. There is a neat school house with eight "scholars" and one master, located close by the ice pond and the meadow where we did most of our work. At each recess the children would rush out to regale us with pears or apples for which they had just climbed, or to bring us dead birds, or merely to show off their acrobatic abilities. They besieged us with questions. We hope our extemporaneous lectures widened their knowledge of natural history and deepened their understanding of the problems of conservation.

To revert to the scientific end of our paper, we show a chart of the numerical results of our banding. (See preceding 4 pages -- Ed.) It will be observed that on some days we worked relatively few hours. These are usually the days on which banding was not possible because of high winds or rain and fog. But on some fairly pleasant days we also lost time shifting our nets, sometimes in order to explore a new location, sometimes in order to net at a feeding station. This last we felt to be important because returns, in succeeding years, might thus be noticed even if the banding were not continued.

Incidentally, we must confess that rain and fog were almost welcome since this offered a respite from the usual gruelling hard work of banding from dawn to dusk, trudging from site to site, making frequent changes in location, and trimming nets in the almost incessant wind.

The coast guard station readily permitted us to copy their weather records. Thus far, however, we have been unable to correlate successfully fluctuations in the bird density with any constant factor in the weather. Up to the moment we have not had an opportunity to attempt any such correlation with the general weather picture.

Flights past Monhegan originate presumably to the north and east. Although it is difficult to band and observe at the same time, we were able to make a number of observations. We are able to say that the birds which have landed on Monhegan make their way, as they feed, toward the west side of the island, the portion nearest Manana which lies to the west. When they take off it is toward the west; not necessarily due west, but westerly. Those that arrive come from an easterly or northeasterly direction. Strong high flyers, such as the geese and cormorants, continue in a southwest direction without stopping.

On the afternoon of the 12th, on the headlands along the east and north of the island, we searched the sea unsuccessfully for birds coming in over the water. It is very easy to overlook a little bird flying low over a great expanse of sea, but we can be fairly sure that no flocks came in overhead; for these we'd have been able to spot. Yet there were many birds around us; juncos, song sparrows, vesper sparrows, myrtle warblers, flickers, a winter wren, crows, many accipiters, and even a pair of ravens. The small birds make their way along the rocks and boulders at the foot of the precipitous, naked cliffs until they find a gully that descends to the sea. Shrubs and small trees that have taken a foothold in these gullies provide cover in which the birds work their way inland.

The hawks course back and forth, alert. It must be relatively easy for the patrolling hawks to sally out over the sea to pluck a tired individual out of the air, and we are told that this has often been seen, but we ourselves did not happen to notice this on the east side of the island. I tied all that remained of a flicker, the yellow feathered wing, to a tall stub where it twirled about in the stiff breeze. As soon as I retired, two sharpies approached to investigate, but neither was deceived.

On other afternoons in previous years we have seen birds come in at eye level or higher, (the headlands stand 160 feet above the sea). Some seemed tired. They would land in the sparse bushes off the rim of the cliff. Others would continue on to disappear in or over the woods. For all we know, those that disappeared over the woods did not necessarily land, but would have continued on their way toward the west without stopping at Monhegan at all.

The 13th was comparatively warm and quiet. Relatively few birds were about. In the afternoon, one of the coastguardsmen rowed us across to Manana. Here there were even fewer birds than on Monhegan. We had an idea that since the birds that leave Monhegan pass across Manana, we would find large numbers of them there. We questioned the "hermit", and from his responses gathered the impression that the flocks which we have seen disappear over Manana do not usually land there but continue on. (The "hermit" is an island celebrity who is described in the book, *The Island Shepherd* by Tolla Niclas, published by the Viking Press, 1959.)

So that you may get some idea of how quickly the bird picture can change, or a significant observation be missed, I'd like to quote from my wife's log for October 14, 1960:

"At 6 A.M. there was a heavy stillness in the air. At first a bit of light appeared in the west, then the east became faintly pink. The pink spread and the whole eastern sky became a strange, glowing rose - as if there were a conflagration. In ten minutes at most the color vanished completely and a gray menacing sky began building up, clouds piled atop clouds.

