

SPRING MIGRATION OF BLUE JAYS AT MADISON, WISCONSIN

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FOLLOWING the publication (Schorger, 1961) of a note on the migration of a flock of Blue Jays (*Cyanocitta cristata*) on 24 April 1960, from Second Point, the thought occurred that this might not have been an isolated incident. Sufficient data have since been accumulated to show that Second Point is a traditional flyway. The jays cross University Bay to Picnic Point (Fig. 1.), then for the most part follow the shore of Second Bay to Second Point where usually there is hesitation in crossing Lake Mendota. My observations were made at an opening 200 feet west of Second Point. Picnic Point and the southern shore of Lake Mendota are well wooded. The vegetation in the spring of 1963 was so advanced during the migration as to limit decidedly the field of vision. In the spring of 1962 some flocks were seen to go northward from Picnic Point and bypass Second Point. It would be necessary to have observers stationed at several places from the tip of Picnic Point to Eagle Heights in order to obtain a complete picture of the migration. What takes place at Madison may not be true elsewhere as the migration is undoubtedly controlled by the local topography. I am not aware of any prior detailed description of a migration of jays.

I was unable in the spring of 1961 to spend adequate time on the migration, but on the morning of 7 May several flocks were observed to leave the point and proceed northward. H. A. Fletcher, Custodian of Picnic Point, informed me that 10 days previously the jays were moving past his cottage in flocks numbering up to 75 individuals. I arranged with Mr. Fletcher to be called when the birds began moving in the spring of 1962. On 1 May he called at 1:45 PM, stating that a few jays were around. At 3:35 I noted a flock of 16 rise from the point and proceed northwestward. On my return a few jays were noted drifting toward the point. The migration was then followed daily from 2 May to 9 May inclusive. On the morning of 27 April 1963, on my way to Second Point, I talked with Mr. Fletcher who stated that he saw two or three flocks numbering five to six on 24 April. On arriving at the point, I saw several flocks leave between 10:25 and 10:47. With the exception of 9 May, I was at the point at 6:00 AM or shortly thereafter from 28 April through 11 May. The migration in 1963 extended from 24 April through 15 May.

A log of the behavior of the jays on the forenoon of 3 May 1962, is given below. The morning was cool and cloudy, and with a light NW wind which became strong at 9:30. The sun appeared at 8:05. (The time as given in this paper is Daylight Saving.)

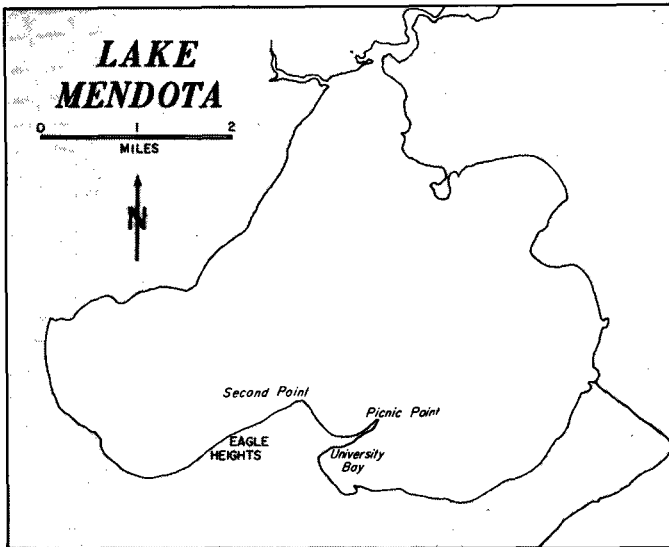


FIG. 1

Time

- 6:12. 40 circled and returned S.
- 6:15. 4 went NW.
- 6:20. 75 made a half turn then flew N.
- 6:22. 60 turned W on reaching the point and dropped in the trees out of sight.
- 6:30. 60 came in, gained height at an angle, and went NW.
- 6:32. 12 circled once and went N.
- 6:34. 30 circled and went N.
- 6:36. 24 made a half turn and went N.
- 6:40. 50 did the same.
- 6:42. 38 circled high and flew NE. Two minutes were taken in gaining elevation.
- 6:46. 31 went NW.
- 6:48. 30 came W turned and flew towards Picnic Point.
- 6:53. 38 circled and went N.
- 6:58. 50 circled, went N, and returned.
- 7:00. 30 joined the above and went N.
- 7:02. 7 arrived and returned S.
- 7:03. 33 arrived and alighted in the conifers.
- 7:07. 50 went N, returned, then went N for good. A flock of 18 followed them.
- 7:17. 100 went N.
- 7:22. 75 came in, circled, went S.
- 7:34. 5 went N, returned, and flew NE.
- 7:46. 50 went N.
- 7:50. 5 went N.
- 7:51. 40 flew NE.
- 7:55. 4 went NW.
- 7:56. 8 arrived and went W.
- 8:05. large flock circled high southward. Lost it.

- 8:14. 24 went NW, then N.
8:17. 100 circled and went N. A few left the flock and, at a slight angle from the perpendicular, volplaned with terrific speed to the trees on the point.
8:26. 37 circled to great height, then volplaned to trees W.
8:27. 25 flew NW over end of point.
8:43. 19 flew N.
9:07. 75 flew N.
9:08. 25 came in and dropped into trees W.
9:15. 21 came over high and went N.
9:21. 30 alighted on point then flew W.
10:15. 50 flying high went NE.
10:19. 12 rose from trees on point, rose, dropped again, then sifted W. I think the wind is too strong for them.
10:35. above number from W alighted on the tip of the point, then returned W.
11:00. left as no birds were moving.

The behavior of a flock arriving from the south is totally unpredictable. The lake is a temporary psychological barrier, and on arriving at the point there is usually hesitation. The usual procedure is to circle, sometimes accompanied by towering if the flock arrives at a low elevation. Occasionally a small flock will proceed directly northward. A flock frequently turns and returns directly southward or it may go in any direction except northward. It was common for flocks to turn and fly westward following the shore of the lake. A flock might tower to a great height, giving every assurance of proceeding northward, then suddenly dive with high speed and with a roar into the trees on the point. Here the birds might remain for a minute, rise, gain their former elevation, and proceed northward. Again after a flock has attained altitude, part will descend to the trees while the remainder will cross the lake.

A flock is usually fairly compact, but may form a long line. The crossing is made occasionally by individuals. On one occasion two jays, equally advanced, proceeded northward 300 feet apart. The largest flocks were estimated to contain 200 birds, but the average was about 25. The migration began shortly after daylight and usually declined rather abruptly by 10:00 AM. Up to this hour a flock would appear about every five minutes; however, on 11 May 1963, there was a gap between 7:27 and 8:26 AM when not a bird was to be seen. Stragglers would arrive and alight in the trees. When one or more ascended, it was an almost invariable indication that a flock, still invisible, was arriving from the south and would be joined. Individuals and small flocks that sifted in were usually noisy, but no calls came from the flocks in the air. Occasionally flocks of four and five would alight close together, and lilt and teeter for a minute or two before drifting away.

Several times one jay was seen to feed another, suggesting pairing. On one occasion three birds alighted in a tree. One was attacked and driven

away. I am unable to express an opinion on the extent of pairing during the migration. Many single individuals as well as flocks with odd numbers were seen. It would seem from the extremely chaotic mixing of the birds in a flock preparatory to leaving the point that the extent of pairing was not great.

Only individuals and small groups were seen to feed. For this purpose they usually alighted on the ground. Occasionally, however, jays would take what appeared to be insects from the limbs of the trees. I do not believe that the birds usually feed in the morning prior to migrating. Food is probably obtained at some time in the afternoon following completion of the flight for the day.

Migration is controlled by the velocity and direction of the wind. The morning of 30 April 1963, there was a north wind of 23 mph with gusts up to 35 miles. I felt certain that this condition would result in an accumulation of jays in the conifers on the point but not one bird appeared. In 1962 the migration was mainly north whereas in 1963 it was northwest. Even a following wind of 15 to 20 mph caused hesitation at the point. The jay is a weak flier and with a favorable wind does not exert itself. On the morning of 28 April 1963, there was a strong SE wind. On leaving the point the birds turned their heads to the SW and allowed themselves to be carried sidewise to the NW. The wind on 2 May 1963 was from the south at a velocity of 15 to 18 mph. In this case the birds turned their heads westward and were carried sidewise northward.

It was impossible to arrive at a reasonably accurate count of the number of birds that went northward, for on every day some flocks returned south and probably reappeared. Jays in migration will not do what is reasonably expected of them. On 7 May 1963, with a south wind of 10 to 15 mph, 1,206 birds were counted. Though conditions seemed very favorable for migrating, so many of the birds returned south that it is doubtful if more than one-third of them was counted but once. The same may be said for the count of 1,562 made the following forenoon.

In September 1952, Robbins (1952) observed a migration of jays at Adams, Adams County, near the Wisconsin River. A count of 750 was made on the 24th of this month. The Wisconsin River Valley would be in the direct line of flight northward for jays leaving Picnic Point. So far I have not detected any fall migration on a large scale in this area.

LITERATURE CITED

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