

## MIGRATION TRAPPING OF HAWKS AT CAPE MAY, N.J.

By William S. Clark

Cape May, New Jersey, located at the southern tip of the state, is a natural concentration point for migrating hawks in the fall. For this reason, last fall (1967) I attempted to trap and band hawks to determine if such a project could yield results commensurate with the effort and time expended. This article presents the results and conclusions of this venture.

Trapping Methods. Two types of traps were used, the Bal-chatri and the bow-trap. The bow-trap was used with a large mist net as a backup. The Bal-chatri was used from a car at certain concentration points, all of which are on the island formed by the canal which is two miles north of Cape May Point. The bow-trap was first located in the Higbee Beach area, and later was moved to the Cape May Point area. Permission for use of these sites was easily obtained, once my purpose was explained.

The bow-trap was used when the hawks were flying, which is very dependent upon wind conditions, and the Bal-chatri was used when the bow-trap was not in operation. On weekends during this period, Robert Simons or Fraser Getgood assisted me and much of the time both trapping methods were employed.

Results. Table 1 shows all hawks observed from the bow-trap setup. It also includes the wind direction and velocity, number of hours manned, and location. Any hawk which could be identified was counted, regardless of how distant it was from the trap. Some large "kettles" of Broad-winged Hawks were observed and their numbers estimated, so designated with a "+" in the table, and probably included other species as well.

The hawks seen away from the bow-trap setup are not included, but many Peregrine Falcons and Pigeon Hawks, and one immature Bald Eagle, were seen.

Table 2 is the total of hawk passes, misses, and daily catches at the bow-trap setup. A pass was counted when the hawk departed from his flight path to make a pass across the lure. A miss is when the bow-trap failed to trap the attacker or, as in most cases, the hawk escaped from the mist net. A miss is not also counted as a pass, and when the hawk was caught, it is shown only in the "caught" column - not as a pass also. All hawks banded were aged as birds of the year except one female Sparrow Hawk, whose age was unknown. Table 3 shows the hawks caught daily using the Bal-chatri trap, and the hours expended in their capture.

Conclusions. The potential for trapping great numbers of hawks exists at Cape May. The information which could be gathered by recording the observed flight by species, various measurements and weight, and the potential for collecting parasites - as well as possible recoveries - well justify the time and expense involved in this trapping.

One of the potential disadvantages of hawk trapping at Cape May is the large number of birders afield there in autumn. However, most of them kindly stayed away from the setup when they realized what it was. Perhaps George Hitchner and his O.R. station have everyone well trained!

It is planned that a trapping station will again be set up next fall at Cape May, providing the New Jersey State Park System, which is to purchase the property used, gives its permission.

TABLE 1. Hawks Observed from the Bow-net Setup

Species	September				October						Nov.	
	25	26	27	30	1	6	7	8	28	29	5	6
Sharp-shinned H.	27	2	2	18	1	36	10	9	93	26	4	13
Cooper's Hawk	8	3	2	3	1	6	8	4	6	1	-	-
Red-tailed Hawk	3	5	5	2	1	4	-	-	11	59	1	1
Red-shouldered H.	-	-	-	-	2	-	-	-	-	1	-	2
Broad-winged H.	10	200+	11	160+	9	500+100+	-	-	-	1	-	-
Marsh Hawk	12	-	2	8	2	4	8	3	1	-	1	4
Osprey	-	1	-	-	-	4	8	3	-	-	-	-
Peregrine Falcon	1	5	-	-	1	-	2	-	-	-	-	-
Pigeon Hawk	-	1	-	-	-	4	1	2	-	-	-	-
Sparrow Hawk	14	4	2	110	4	65	30	14	18	8	4	11
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Wind direction	NW	S	S	WNW	W	N	NE	E	W-NW	NE-NW	NW	WNW
Wind speed (est.)	10	7	10	15	10	15	15	10	15	10	20	20
Hours manned	6	3	2	7	4	6	8	7	7	7	6	5
Location:	Higbee's Beach-----/-----Cape May Point											



TABLE 2. Bow-Trap Setup Results

Species	September				October					Nov.		P a s s e s s	M i s s e s s	C a u s e s s	
	25	26	27	30	1	6	7	8	28	29	5				6
Sharp-shin				3		1			6	2			16	2	12
Cooper's						1	1						6	1	2
Red-tail	1									1			4	2	2
Red-shoulder										1			-	-	1
Broad-wing	1												2	1	1
Marsh Hawk							1						4	-	1
Peregrine	1												3	-	1
Pigeon Hawk													2	1	-
Sparrow Hawk	1			2									17	5	3

(See Table 1 for wind, hours and locations.)

TABLE 3. Bal-chatri Trap Results

Species	September				October					Nov.		Total Caught	
	25	26	27	30	1	6	7	8	28	29	5		6
Red-tail				1									1
Broad-wing				1									1
Sparrow Hawk	17	12	13	7	8	5	21	22					105
Loggerhead Shrike		1		1									2
							* * *						
Total Hours	11	4	6	13	4	2	8	8	2	2	4	3	

(Note: Bal-chatri results and hours for Sept. 23 & 24, and 28 & 29, are included in the table under the 25th and 30th, respectively, for reasons of space. -Ed.)

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