



The July/August 1971 issue of EBBA News is devoted to raptors. We would like to begin with a photo of a Merlin, taken at Fire Island Research Station, Long Island, New York, by Thomas H. Davis. For further material on raptors, please turn the page.....

MIGRATION TRAPPING OF HAWKS (AND OWLS) AT CAPE MAY, N.J. -- FOURTH YEAR
By William S. Clark

This article reports the results of the 1970 autumn hawk trapping project at Cape May Point, New Jersey. (See 1, 2, 3 for previous year's results.) The author was only able to be present at the trapping station for the initial setup and the last few days before closing. However, the station was operated this season by other banders, who maintained the continuity of the project. Throughout I shall use the more esthetic names of Kestrel for Sparrow Hawk and Merlin for Pigeon Hawk.

The Trapping Station

The station trap setup this fall was essentially the same as last season's. (3). The essential difference was the experimental use of a Dho-Ghaza trap as described later in this paper. During the first week, an additional mist net was set up on the north side of the station, extending east into the field. However, it was found that this net caused many hawks to break off their approach too early as the net was too visible. Too many of the hawks that hit it, escaped. . .

Figure 1 depicts the type of Dho-Ghaza that was used. This trap is basically a net made from fishing gill netting and measures 5' x 6'. The circumference consists of 20# test braided nylon fishing line that has been woven through the outer squares of the netting. This netting was dyed blank. To the corners are attached 7/8 inch diameter O-rings that travel up and down 1/2 inch conduit poles. At each of the top corners of the net is a short strand of the nylon line which is fed into the spring clothes pins to hold the net upright. A hawk flying into the net causes these strands to pull out of the clothes pins and the net to fall around the flying bird as shown in the figure. One of these nets was used throughout the season on an experimental basis. (Other hawk trapping stations, such as Cedar Grove in Wisconsin and Point Pelee in Ontario, use these nets in lieu of mist nets with great success.)

Trapping Results

Table 1 reports the daily catch of hawks trapped and banded at the station. In addition, it gives the daily average wind and velocity, the station operator, and the number of hours the station was operated.

The station was set up initially the weekend of August 29-30 for equipment checkout and operator familiarity. Then it was run continuously from September 5 to October 31, yielding 59 days of banding. The Bal-Chatri trapping at night and away from the station on no flight days was limited and yielded only 1 Great Horned Owl and 3 Kestrels.

Table 2 shows the number of hawks caught by types of traps by species. As will be noticed, the Dho-Ghaza experiment proved profitable. The Bal-Chatri traps placed out in the field were only used by some of the operators and only when the hawk flight was not strong.

The daily combined count of hawk "passes" and "misses" is summarized in table 3. A pass is counted when the flying hawk is lured away from its intended flight path to approach the lure birds. A miss is tallied when a hawk that should have been caught escapes for any of a number of reasons, such as getting out of the mist net, equipment failure, etc.

Table 4 is a daily count of all hawks seen and identified as to species from the station and includes the numbers from tables 1 and 3.



Immature Cooper's Hawk (Photo by the author).

In analyzing and comparing these results with past seasons, it is important to consider that the author, who has the most experience and familiarity with the station's operation, was only present to set up the station, two days, and to take it down, three days. There were no flights on these days; 35 additional days were run by "Rookie" banders with no previous experience, and 19 days by operators with one season's experience.

The total catch of 237 hawks banded yielded an average of four hawks per day. Both of these figures were less than comparable numbers for the last season, no doubt due to overall inexperience, as mentioned earlier. However, the number of small falcons banded increased. Since these may be called the "specialty" of this station, this was certainly a most gratifying result. (No other hawk trapping station to the author's knowledge comes anywhere near the number of Kestrels and Merlins banded at this station.) The four Peregrines banded also was a record high.

On the subject of Peregrines, it has been assumed that these falcons which migrate along the east coast of the U.S., are birds that breed in the tundra, the subspecies *Falco peregrinus tundrius*, as described by White (4). However, almost every one banded at this station has a measured wing chord that exceeds those reported by White (measurements of museum specimens that he considers to be this subspecies). These data indicate that the birds at Cape May are the continent breeding subspecies (*F. p. anatum*) that inhabits Canada and the western U.S. and formerly bred in the eastern U.S. However, all these birds were immature and exhibit the very light head which White gives as a characteristic of the tundra Peregrines.

The number of Sharp-shinned Hawks banded dropped by half this season. Explanations for this result may be: 1) There was a large number of "misses" of this species, and 2) last season the percentage of "sharpies"



Sharp-shinned Hawk caught
in Dho-Ghaza.

Male Kestrel



Marsh Hawk caught on Bal-
Chatri.

(All photos by the author)

in the total flight was considerably higher.

This season was, in spite of some of the above results, more exciting than previous ones for the operators. From the author's experience, an "exciting" day is one with over 20 passes or with more than eight hawks banded. By this criteria half the days in 1970 were exciting. 1969 had only about 1/3rd. The previous high for the daily total number of passes was 76. This season there were two days with more than 100 passes, 152 and 130.

Interesting Experiences

Operating a raptor trapping station requires concentration and patience, and is often extremely boring. But it can also be very exciting and fun. Unusual occurrences are part of the fun, and some of the season's more interesting events are described below.

It's customary to spread a little bird seed on the ground for the lure birds to eat while they are "working". Larry Hood noticed an unusual sparrow free-loading on this grain. When this bird wandered into the range of one of the small bows, he set it off and captured it. This station can now boast that it is the only hawk trapping station to have "trapped" a Lark Sparrow.

On another occasion, Larry was out in front of the mist net when his assistant, Don Lehman, saw and lured in a Merlin. The bird made a pass at a sparrow lure and was caught in the mist net. Another example of Larry's magnetism toward hawks. (See 2, 3 under this heading).

Gerry Mersereau and Sammy Chevalier had a Sharpie make a pass at a sparrow and hit the Dho-Ghaza. Only one side fell, but it was enough to catch the bird. (Almost all other operators lost birds due to this malfunction.)

On another occasion they "lured" in an Osprey, which sat out in the field and ate his lunch (a fish, of course).

There is something fascinating and mystical about the Peregrine Falcon. It's quite an experience when one catches and bands his first one. This was true for Joe Harmer, who had to work hard for his. He lured the falcon in directly to a Starling on one of the small bows and pulled the trigger, but the bow malfunctioned. Joe ran out of the blind and chased the bird off and fixed the bow trap. The Peregrine flew off but remained in the area circling overhead. Joe returned to the blind and flapped the pigeon lure. The falcon made repeated passes over this bait, but did not bind to it or hit the mist net. It then retired to a nearby tree and just watched. When Joe moved the sparrow lure, the bird made a quick pass, directly into the Dho-Ghaza. Persistence was rewarded.

Future Plans

Next season the location and the setup will remain the same, except that more Dho-Ghaza nets will be used. A new blind will be built that will be larger and more comfortable. The station will be in operation from Labor Day through early November.

The assistance of the following persons at the station was greatly appreciated by the banders: Sammy Chevalier, Pete Davis, Gordon Ivins, Don Lehman, and Lance Morrow.

The operators of the station this season, in alphabetical order were: Joe Harmer, Larry Hood, Greg Ivins, Jerry Mersereau, Brian Sharp, and Brad Mitchell. Their cooperation in this venture was necessary for the continuity of this project.

Anyone desiring to assist or visit the station should contact the author or any of the operators. Unplanned visits are not appreciated at the station due to the nature of operation, but are most welcome when arranged beforehand. It is also possible to schedule demonstrations for groups. The accompanying photographs were taken during this season's operation by Greg Ivins.

Literature Cited

1. Clark, W. S., Migration Trapping of Hawks at Cape May, N.J., EBBA News 31(3)- May/June 1968.
2. Migration Trapping of Hawks at Cape May, N.J., second year, EBBA News 32(2)- March/April 1969.
3. Migration Trapping of Hawks (and Owls) at Cape May, N.J., third year, EBBA News 33(4)-July/August 1970.
4. White, C. M., Diagnosis and Relationships of the North American Tundra-Inhabiting Peregrine Falcons. The Auk. 85(2)- April, 1968.

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TABLE 1. Daily Trapping Results

(table continued on following page)

Species	August												September																
	Daily Total	W	SE	NW	NW	SE	SE	SE	SE	NE	NE	SE	S	S	S	NE	S	NW	SE	SW	W	SW	S	S	SW	SW	NE	NW	S
Kestrel	0	3	2	2	3	0	0	0	10	10	1	2	4	1	8	6	4	11	1	3	4	4	4	5	2	1	11	4	1
Sharp-shin	29	30	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Merlin	3	2	2	2	3	2	2	10	10	10	1	2	4	1	8	5	2	9	1	2	2	3	1	3	1	2	3	1	
Cooper's						R	A								1	2	2												
Peregrine						I	N																						
Red-tail						I	N																						
Broad-wing																													
Marsh																													
Daily Total	0	3	2	2	3	0	0	0	10	10	1	2	4	1	8	6	4	11	1	3	4	4	4	5	2	1	11	4	1
Avg. Dir.	W	SE	NW	NW	SE	SE	SE	SE	NE	NE	SE	S	S	S	NE	S	NW	SE	SW	W	SW	S	S	SW	SW	NE	NW	S	
Wind Vel.	10	10	10	5	5	10	10	5	10	10	8	11	11	9	10	9	10	10	10	10	10	10	10	10	10	10	10	10	
Sta. Hours	6	7	5	10	8½	6¼	6	9	10	8	11	11	9	10	9	10	10	10	10	10	10	10	9½	7¼	5	3½	8½	8½	7½
Operator	C	C	I	I	I	I	I	I	I	I	I	H	H	H	H	H	H	HM	M	M	M	M	M	M	Me	Me	Me	Me	Me
Kestrel	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
Sharp-shin	1	1	1	1	1	4	2	2	1	2	3	4	1	2	5	1	2	3	1	2	2	3	1	3	1	1	2		
Merlin	2	1	2	1	1	4	2	2	1	2	3	4	1	2	5	1	2	3	1	2	2	3	1	3	1	1	2		
Cooper's	2	1	2	1	1	4	2	2	1	2	3	4	1	2	5	1	2	3	1	2	2	3	1	3	1	1	2		
Peregrine						1	1	1	2	2																			
Red-Tail																													
Broad-wing	1							2																					
Marsh																													
Daily Total	13	4	4	9	3	6	2	6	5	3	3	8	8	4	4	6	23	11	4	1	2	0	0	3	4	0	1	4	
Avg. Dir.	NE	S	SW	NW	N	E	SE	SE	E	E	E	E	SE	S	S	S	N	N	W	NW	E	SE	SE	NE	NW	E	NE	NE	
Wind Vel.	5	10	10	10	5	10	5	10	10	15	15	5	5	5	5	10	15	15	10	10	10	10	10	5	3	5	10	15	
Sta. Hours	9	9	8½	8	9	8½	9	8	9	9½	4	4	9	10	10	9	8	8	10	10	8	4	4	4	9	9	8	5	4½
Operator	Me	Me	Me	Me	S	S	S	S	S	S	Ha	Ha	Ha	Ha	Ha	Ha	Ha	Ha	H	H	H	I	I	I	I	I	I	I	

AUG	S E P T E M B E R												O C T O B E R																										
	29	30	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11
Kestrel	27	62	31	260	114	9	1	2	113	26	44	120	11	608	195	42	777	77	20	135	127	75	90	150	49	177	267	47	106	36	18	78	18	28	4	25	25	34	21
Sharp-Shin			3					1	2	5	5	17	1	27	37	34	216	116	125	82	43	5	11	23	24	55	30	46	166	54	44	21	50	12	67	3			
Merlin														4	16	11	27	13	6	2	3	2	27	3	3	9	6	9	12	4	2	3	5	6	7				
Cooper's																																							
Peregrine																																							
Red-Tail																																							
Red-Shoulder																																							
Broad-wing	5	7	4	19	16	2																																	
Mourning H.																																							
Golden Eagle																																							
Bald Eagle																																							
Turkey Vulture	2																																						
Osprey	4																																						
DAILY TOTAL	37	75	38	285	137	18	1	4	126	30	56	133	16	688	255	466	82	761	73	360	274	216	183	289	59	227	519	704	215	91	88	269	16	250	82	209	249	185	33

	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	TOTAL
Kestrel	58	44	13	24	150	68	101	25	26	2	3	5	5	15	15	8	2	3	4	2	6588
Sharp-Shin	4	117	70	120	243	283	118	158	126	8	3	70	139	151	33	36	93	56	18	44	3516
Merlin	19	10	3	3	2	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	241
Cooper's	8	3	8	6	6	27	28	25	3	1	6	8	6	8	1	6	3	2			209
Peregrine	2	3	4	1	2																40
Red-Tail	2																				538
Red-Shoulder																					28
Broad-wing	2	6																			1266
Mourning H.	7	5	1	3	53	118	115	34	1	2	6	3	1	2							516
Golden Eagle																					2
Bald Eagle																					1
Turkey Vulture	2	4																			328
Osprey	133	177	81	136	100	152	372	80	181	15	8	84	170	172	62	48	111	97	26	56	180
DAILY TOTAL	133	177	81	136	100	152	372	80	181	15	8	84	170	172	62	48	111	97	26	56	13453

TABLE 4. DAILY SUMMARY OF ALL HAWKS SEEN

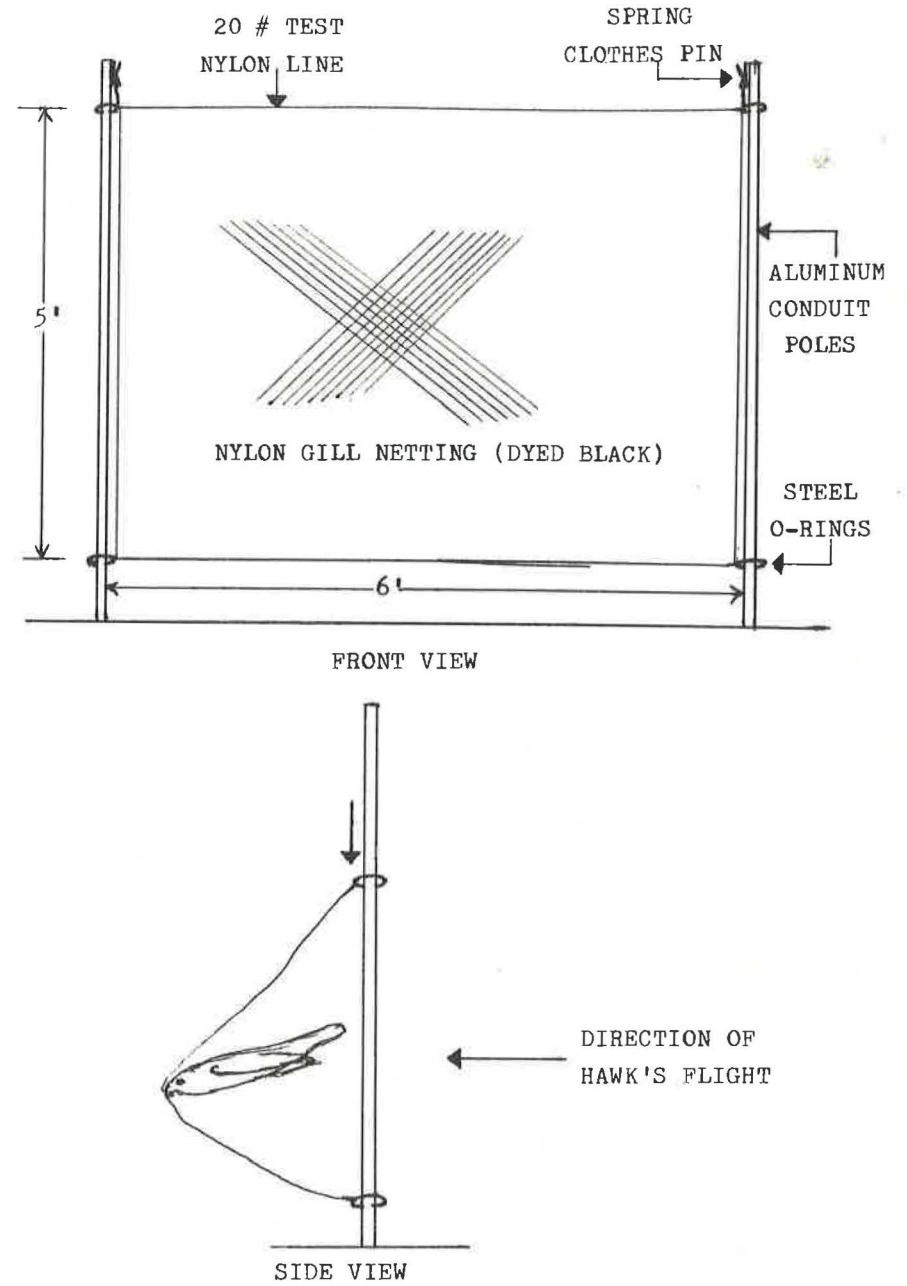


FIGURE 1. DHO-GHAZA