

NET HOURS: THE MYTH OF THEIR IMPORTANCE  
By Mabel Warburton

Net hours are computed by taking the number of mist nets in use times the number of hours the nets are in operation. At Island Beach Operation Recovery, the policy has been for each bander to erect nets upon arrival and keep them in continuous operation until the end of his stay. The net hours per day are then reckoned by taking the number of nets times 14 hours of daylight from the starting date in August until September 15, then gradually reducing the daylight hours until the operation is closed, about October 31. Birds per net hour are found by dividing the total birds banded by the total net hours.

In the belief that too much emphasis is put upon the importance of this netting information, I propose to show in this paper, that it is possible for net hours and birds per net hour to show two things, and two things only; namely, the number of hours the nets were in use, and the average number of birds caught for each of these hours. Any other conclusion reached by using these two factors only, must of necessity be conjectural.

My personal records show that on September 15, 1966 at Island Beach Operation Recovery, I netted 7 birds in 72 net hours, or .097 birds per net hour, an extremely poor average. This could mean any or several of the following:

1. There weren't many birds at Island Beach that day.
2. My nets were not in the right pathways, or they were running from north to south rather than from east to west.
3. My nets had skimpy pockets, or they were strung too tightly to be effective.
4. The birds in the area on that date were largely Flickers whose powerful wings and feet enable them to climb up and out of the pockets.
5. The birds on that date were all small species; my nets had medium to large mesh and small birds went through.
6. The wind was strong; and the nets billowed too much to retain birds; or the weather was too wet for many birds to be moving.
7. The birds on this date were the high-flying species and went over the nets.
8. I got up too late and missed the morning flight.

Again referring to my records of Island Beach, on October 21 I netted 669 birds in 20 net hours, or 33.45 birds per net hour. What could this large percentage mean? The antithesis of a poor day - favorable weather, plentiful birds, well-hung nets?

Just as birds per net hour are influenced in my personal banding by innumerable and oftentimes hidden factors, moreso are the birds per net hour in an operation recovery program where the banding is done at various stations, by numerous banders, over long periods of time, and under conditions varying from ideal to almost intolerable.

Variations in the Island Beach figures for the past five-years are as follows:

<u>Year</u>	<u>Birds Banded</u>	<u>Total Net Hours</u>	<u>Birds per Net Hour</u>
1962	21,718	28,836	.75
1963	31,676	33,362	.95
1964	17,887	15,810	1.13
1965	18,573	19,371	.96
1966	25,556	13,911	1.83

There is a marked increase in the birds per net hour for the 1966 season, and the question is why?

At various operation recovery stations different policies regarding the hours of netting prevail. Some reports from stations follow.

Marledor Sanctuary, New Gretna, N.J., run by John and Mary Schmid. Mary reports: "I closed nets about 10:00 to 10:30 usually, then opened them about 4:30 to 5:00 in the afternoon".

Brookhaven O.R. Station, Long Island, N.Y. Walter Terry writes: "We band in the morning only and even then we quit before noon if birds are scarce".

Leroy Wilcox of Tiana Beach O.R. tells me, "if it is a slow day I only band three or four hours mornings, but on good days I usually band all day except for two to three hours in mid-day when I drive home ... I never have operated on Sundays".

In the face of such heterogeneous netting information what correlation is possible between operation recovery stations? Yet I am told that it is only in using net hours that we can in any way correlate the activities of the various banding stations; that without net hours and birds per net hour the total catch is meaningless. Even though Island Beach Operation Recovery Station has heretofore operated day in and day out, in all kinds of weather, from before sun-up until after sundown, while other operation recovery stations are closed down except for peak hours, its

net hours and birds per net hour are still "correlated" with other operation recovery stations for "meaningful" information.

Aside from the time of day nets were run, there are other contributing factors which make the correlation of even two net lanes have a doubtful outcome. I speak of the personal factors which can never be known without long association with the banders in question, or a poll of their personal netting habits and idiosyncracies. You can scan a summary sheet until Doomsday and never find out how Bander X hung his nets nor of what variety they were, but what could be of more importance than the net which makes bird capture possible?

You may search the daily sheets of Bander Y and never know the exact hours of the day his nets were in operation. Though his first bird was banded at 0600 and his last at 1400, making it appear that he netted for eight hours, his total net hours for the day may show only six hours of operation, and you are left to hazard a guess as to what two hours his nets were closed and why.

You can ascertain what the weather conditions were on any past date, but the banding habits of Bander Z may never be known; be he fast or slow, skillful or clumsy, conscientious or careless; yet all these factors may change the birds per net hour statistics in an appreciable way.

The whole story has many facets. Its factors are both hidden and obvious. My conclusion is, therefore, that the practice of using mist net hours and birds per net hour as a basis of comparison between netting operations is so dependent upon outside and often unknown factors as to be meaningless.

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#### SOOTY TERN AGE RECORDS

Dr. Oliver L. Austin of the Florida State Museum writes, "Our trip to the Tortugas to net adult Sooty Terns last month (April) was a great success and broke all previous records. We had fine netting weather, and in six days caught a sample of almost 8,500 birds, of which slightly more than 30% were returns from previous years! Among them were 15 birds banded before 1941, including one of uncertain age banded as an adult in 1940, and our oldest bird of known age to date, banded as a chick in 1937. All the old bands were still perfectly legible.

"On our second trip (in June) we banded 20,000 chicks, which wasn't too bad, and netted another 7,500 adults of which again 30% proved banded, and included four more of our ancient birds, all banded as chicks in 1940 and all with unmistakable brood patches."