THE BARN SWALLOWS OF GREAT GULL ISLAND By Frederick S. Schaeffer

A field program sponsored by the American Museum of Natural History and the Linnaean Society of New York enabled me to work on Great Gull Island during the breeding seasons of 1966 and 1967. Great Gull Island is located northeast of Plum Island, about ten miles south of New London, Connecticut, at grid coordinates 411-0720. The Island is about 800 meters long at its longest point and about 200 meters wide at its widest point.

During World War II, the army occupied this site which was then known as Fort Mitchie. Large bunkers, gun emplacements and assorted wooden tunnels still make up the larger part of the island and make excellent nesting areas for the Barn Swallows. The island now belongs to the American Museum of Natural History and is being used as a research area. Other studies being conducted concurrently are on Common and Roseate Terms, Spotted Sandpiper, Redwinged Blackbird and visiting migrants, by Miss Catherine Pessino, Miss Helen Hays and Dr. Donald Cooper and others, without whose help my study would not have been successful.

METHODS Barn Swallow nests were located and tagged in June and July (1966) and from May through July (1967). Whenever possible a day-to-day record was kept on each nest, the young were banded in most cases, and the adults were banded on the nest by means of a simple and foolproof technique in 1967. As most of you banders have probably discovered by now, catching Swallows in daytime is not easy. It occurred to me that the adults could be lifted from the nest by hand very easily but there are several dangers one has to keep in mind. Trapping has to be done at such a time that it is dark enough outside, so that there is no danger that swallows when a roused fly outside and get lost. Please bear in mind that they cannot see in the dark.

Upon entering the room or general area where the nest is located, shine a flashlight with a sharp piercing beam directly at the nest. You must make certain that the beam does not waver from side to side, as this will arouse the bird and cause him to fly into a dark corner and hit himself against an opposing wall. A piercing beam, held absolutely still will however keep the bird on the nest. When you are about three feet away from the nest switch your light off and wait about five minutes. It is essential to be absolutely still. Then, with the aid of a small penlight, preferably with a weak battery or a taped-up lens, gently cover the nest and bird with your hand and you've got him.

The most difficult thing, however, is to get him back on the nest as the bird is visibly excited by then. Again, the main thing to remember is to keep a piercing beam right on the nest. One can put the flashlight on the ground for that purpose. When you release the bird, it will fly toward the nest, because that is the only place it is light. The more difficult part of this phase is to extinguish the light immediately and again wait as quietly as possible for about five minutes. After that,

one must leave in total darkness which, on Great Gull Island, isn't easy considering the great many open manholes there are. I have banded most adults in this way and to my knowledge it did not hamper the incubation at all.

RESULTS 1966 was very successful with a total of 20 nests of which 19 had eggs and young. In 1967 however, particularly due to the rains of July 2nd and 3rd, of a total of 21 nests slightly less than half deserted. In 1966 there were seven nests with five eggs but in 1967 there were only two.

In both years only one brood was observed and it is my opinion that if there is a second brood, it does not take place on Great Gull Island. It was interesting to see how adults whose nests had been destroyed by the rains renested again and again. In one case, a pair first established themselves on June 10. This nest, #52, was found with four eggs in it on June 24. Two eggs hatched on July 1 and the whole nest washed away on July 3. On July 5, I observed the same pair building a new nest in the same area which I numbered #59. On July 8 it had one egg but on the following day the egg was destroyed. Although I am not sure, it could well have been done by a Bluejay which I "caught red-handed" cracking the eggs of neighboring nests. On July 10 the same pair was sitting on an old 1966 nest, renumbered as #58, and that night I found two eggs. On July 13, my last day on the island, there were three eggs and I was sorry I did not have the opportunity to watch their progress any further.

Less frustrating attempts to start a family were observed in the case of nest #54. On June 17 there were two eggs. On the 24th there were four and the following day, five. On July 1, there were five young, one of which was cast out of the nest on July 6. By July 13 two were able to fly. Similar is the case of nest #45 which had a total of six eggs by June 17, 6 young by July 5. Then two died for reasons unknown, but by July 13 all four were flying as expertly as their parents.

There is one more nest which is worthy of mention. Both in 1966 and 1967 the same female occupied this nest (band #72-97957), located in a room which used to be a bathroom. The nest is located in the recessed top of a water reservoir designed to flush the toilet located beneath. The peculiar point is, however, that this nest is in total darkness except for a few minutes during the afternoon when the sun is in a particular position so as to shed some indirect light into the room. In 1966 four nestlings hatched on this nest and in 1967 there were also four. The extremely moist condition of this room - dripping walls, wet floor - does not seem to affect nesting success.

On September 17, 1966 during Operation Recovery one young, hatched at Great Gull Island, was retrapped at John F. Kennedy Refuge (403-0732). Not

only was it a great coincidence that this bird should pick this refuge as a feeding place, but it came back to me, as I banded it on the island on July 30, 1966. As this could happen again at another 0.R. station, the following is a list of band numbers used:-

1966 - 56-57901 through 57927 72-97911 through 97962, and 97964, 97965

1967 - 72-94061 through 94064, 94072, 94074 through 94095, 94099 and 72-94100.

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WANTED: INFORMATION ON Sister Jane Patricia writes, "I am planning a FRANCE AND GERMANY trip to France and Germany next summer ... Can anyone tell me where to go to hear and see the Nightingale and the Cuckoo? In a former trip I was told that they are few and hard to see. Is there some village or district where I might plan to stay a few days with good hope of hearing one or the other?" Anyone who can be of assistance is requested to write Sister Jane Patricia, C.S.J.B., St. John Baptist School, Mendham, N.J. 07945.