

Synchronous Nest Building and Egg Laying Among House Sparrows

James N. Sappington  
Department of Biology  
William Carey College  
Hattiesburg, Mississippi

Synchronization of nest building and egg laying by many social species of birds has been observed and reported. Notable studies have ranged from those of various species of gulls (Darling 1938) and blackbirds (Orians 1961) to ploceids (Crook 1960; Hall 1970), including the House Sparrow (Passer domesticus) (Summers-Smith 1963). In a 3 year study of House Sparrow breeding activities conducted on the main campus and adjoining areas of Mississippi State University, Oktibbeha County, Mississippi, from 1972 through 1974, I observed synchronous patterns in nest building and egg laying. Four nesting areas were studied: (1) 4 trees (Magnolia grandiflora) espaliered on the walls of Lee Hall in the central part of the campus; (2) a large barn where sheep and horses are fed and kept overnight; (3) an equipment shed and orchard; and (4) a cluster of buildings associated with a pig feed lot.

Both nest building and egg laying were observed under natural conditions in each colony. I plotted the location of each nest on a sketch map of the tree or building which contained it. The date of the beginning of nest building at each site was also recorded when it was known. Individual nests or blocks of nests located in the same area were observed for one-half or full-day periods beginning at 07:00 and lasting through 18:00 hours CST.

Nests were checked daily between 07:00 and 08:00 for eggs. The date of the laying of the first egg and appearance of the last egg in each clutch were recorded. I divided the breeding season into weekly periods and recorded the nests built and eggs laid during each period.

During the 3 breeding seasons 584 nests were built at 296 sites at the 4 locations. The earliest nest was started 10 February, and the latest was started 21 July. Peaks of nest building activity occurred during mid March, late April, early June and early July for 1974. For both 1972 and 1973 similar rhythmic patterns were noted. Others state that House Sparrow nesting is highly synchronized (Mitchell et al. 1973; Summers-Smith 1963; Weaver 1939).

Of the 584 nests built, 532 contained eggs. Egg laying during each of the 3 years embraced a span of approximately 5 months with the earliest egg being laid February 24 and the latest July 28 for the 3 year period.

Peak periods of nest building were generally followed within a week by intensive egg laying. Data for 1974 are presented in Figure 1 as an example. Four distinct cycles of laying occurred throughout the breeding season each year. Weaver (1939) found 4 distinct cycles at 5 to 6 week intervals in New York. Mitchell et al. (1973) also found 4 cycles of egg laying in Texas. Summers-Smith (1963) found a similar pattern of breeding

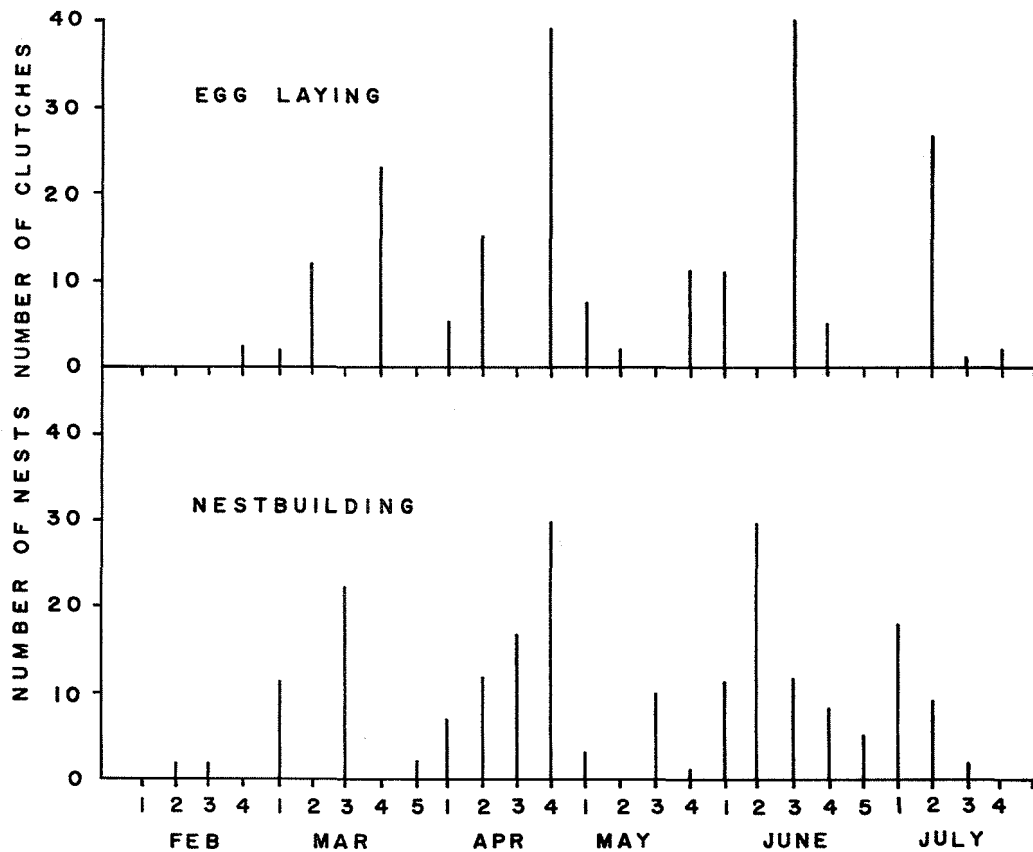


Figure 1. Timing of nest building and egg laying by House Sparrows at Mississippi State, 1974.

in Great Britain. In spite of differences in location and latitude, there are amazing similarities in the 4 data sets.

I wish to thank Dr. Jerome A. Jackson who encouraged the writing of this manuscript and Kenneth Bicker, Robert Kirkland, Gordon McWilliams, and Robert Stewart for their valuable assistance in data collection.

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#### Some Bird Lore Collected in Mississippi

Beulah M. D'Olive Price  
P.O. Box 7  
Corinth, Mississippi 38834

Bird lore, like general folklore, transcends geographical boundaries. Thus it is that there may be many similarities to such lore as found in Mississippi with that found in other localities.

The folklore pertaining to birds which is used here was collected for the most part in Alcorn County, one of the hill counties in northeast Mississippi. Some of it, however, is from Decatur and Hattiesburg. My informants for this article were Ovid Vickers, Decatur; Mrs. R. T. Davis, Hattiesburg; Mrs. Troy Norvell, Alcorn county; Mrs. Alfred Crum, Alcorn County. My own contributions will be designated by P. I live at Corinth, Alcorn County. The informants will be designated by the first letter of their surnames.

The superstition heard most often pertained to owls. Puckett (1926, Folk Beliefs of the Southern Negro. Univ. N. Carolina Press, Chapel Hill)