

The eastern House Finch nesting in Purple Martin houses and gourds

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A NATIVE OF WESTERN UNITED States, the House Finch (*Carpodacus mexicanus*) was artificially introduced into the eastern United States in 1940 near New York City and had its first recorded eastern breeding in 1943 at Babylon, Long Island, New York. In the 48 years since its release, it has undergone both a massive population increase and a dramatic range expansion, each of which has been well documented in the pages of *American Birds* and its predecessor, *Audubon Field Notes* (Katholi 1967; Buckley 1971; Bock and Lepthien 1976; Mundinger and Hope 1982), and happened so rapidly that Peterson (1980) described it as "explosive." Herein I present the first published record of nest-site competition between the introduced eastern House Finch and one of our native species, the Purple Martin (*Progne subis*).

Neither Allen and Nice (1952), Wade (1966, 1987), Layton (1969), nor Jackson and Tate (1974) list the House Finch as a nest-site competitor of the Purple Martin. On April 25, 1986, a male House Finch was observed singing from the porch of an aluminum, 24-compartment martin house which had been erected on April 19 one mile north of Edinboro, Erie County, Pennsylva-

nia. On May 1, I lowered the house and found a completed House Finch nest with five lightly spotted, pale-green eggs. On May 11, the nest contained four 2-day-old, downy young. On May 16, a pair of House Sparrows (*Passer domesticus*) began carrying nesting material into the house. Each time the House Finches came to feed their young, the male House Sparrow attempted to chase them away, but by the following day,

The Purple Martin has yet another introduced nest-site competitor

the sparrows ceased their activity and were not seen again. The four House Finch young fledged May 25 and their parents did not attempt additional broods in this martin house during the remainder of the summer. In fact, no other species of bird nested in this house during 1986, not even Purple Martins, despite the fact that there was an active colony site just 40 meters away. The

House Finch was first recorded in Erie County, Pennsylvania, on April 22, 1975 (Stull *et al.* 1985), and first recorded as an Erie County breeder in 1977 (Hall 1977).

To determine whether this particular nesting of the eastern House Finch in a martin house was an isolated case or indicative of a more widespread pattern, I wrote letters to each of the Regional Editors of *American Birds* within the finch's eastern range. None had ever heard of this behavior. I also published a "Request for Information" in both the June and July issues of the *Nature Society News* (formerly the *Purple Martin News* and the *Purple Martin Capital News*), which is a monthly tabloid from Griggsville, Illinois, catering to Purple Martin enthusiasts. This, plus letters sent to the Purple Martin Conservation Association headquarters in connection with its Colony Registration Program (see *Audubon* 89(4):18; *American Birds* 41(1):175), generated an additional 21 reports from eight different states of the eastern House Finch nesting (or attempting to nest) in cavities intended for Purple Martins. This not only indicated that mine was not an isolated case, but also emphasized that the phenomenon is widespread. The eight states



Figure 1. May 23, 1986, a male eastern House Finch about to feed his young at a nest built in an aluminum, 24-compartment martin house (the "Castle" manufactured by Trio Manufacturing Company, Griggsville, IL) erected near Edinboro, PA. The nest is in the compartment immediately behind the bird. House Finches feed their nestlings by regurgitation. Photo/James R. Hill, III.

were New York, Maryland, Pennsylvania, West Virginia, Maine, Rhode Island, Virginia, and Ohio.

The evidence clearly shows that occasionally the House Finch competes with the Purple Martin for its man-made nesting sites. My observations, and those of others, indicate that the eastern House Finch attempts nesting at both active and inactive colony sites of the martin, in single or multiple pairs, in or without the company of martins and sparrows, and will use both gourds and houses. This generalized nesting flexibility, coupled with the fact that the House Finch is also a year round resident, gives it a temporal advantage over the martin in acquiring nest sites. It has been established that House Finches had nests built and eggs laid well before the martins returned to their colony sites. It is possible that in the east the House Finch has the potential of becoming a serious nest-site competitor of the Purple Martin.

With regard to nest-site flexibility, Terres (1980) states that the House Finch occupies a niche in the west like

that of the House Sparrow in the east and says it nests in "cavities in trees, buildings, in bird boxes, in dense outer foliage of trees, shrubs, and in vines, in tin cans hanging on posts, in cholla cactus, on [the] ground, in old nests of towhees, orioles, Cliff Swallows, phoebes, parts of hawks' nests, holes in utility poles, etc." Woods (*in Austin 1968*) cites several instances of House Finches usurping nests of other species. The House Finch also competes within its native western range for nest sites with the Purple Martin, particularly for the single-compartment martin boxes placed (as part of a martin management program) on wooden pilings (and for the cavities in the pilings themselves) along the Multnomah Channel east of Portland, Oregon (D. Fouts *pers. comm.*). In Pennsylvania, the House Finch typically nests in low, dense, ornamental spruce trees, or less commonly, in man-made objects such as hanging flower baskets, outdoor lighting fixtures, etc. (*pers. obs.*). This nesting behavior is similar to that of the introduced House Sparrow (Bent 1958;

Harrison 1975). In fact, the nest sites chosen by the House Finch and the House Sparrow are so similar that nest-site competition may explain the correlation found by Kricher (1983) between recent House Finch increases and House Sparrow declines. At some locations, the House Finch is so abundant, observers believe it now outnumbers the House Sparrow (Kibbe 1981).

It is hoped that this species will not become another widespread, secondary-cavity usurper of the Purple Martin as are the introduced House Sparrow and the European Starling (*Sturnus vulgaris*) (Jackson and Tate 1974; Brown 1977, 1981) and more recently the Budgerigar (*Melopsittacus undulatus*) (Jackson 1978; A. Wenner *pers. comm.*). As the population of the eastern House Finch steadily increases and its nesting sites become more limited, there is every reason to believe that its use of martin houses and gourds will increase, especially if it experiences an increased reproductive success nesting in such sites relative to its more conventional sites. If this occurs, then a "tradition

drift" (Wilson 1975) in nest-site choice might be expected to follow, at least locally, with an increasing percentage of the population nesting in martin houses and gourds with each succeeding generation. But whether the House Finch introduction turns out to have a detrimental, neutral, or even beneficial effect on martin populations remains to be seen. The possibility even exists that the Purple Martin may actually benefit from the House Finch's addition to the eastern avifauna, especially if it displaces the House Sparrow.

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