

The presence of four birds around the nest early in the nesting cycle suggests that this nesting was initiated by two pairs of adults occupying the same site; polygyny, therefore, appears unlikely. Of approximately 180 nests of the Tree Swallow I have examined, only one other contained an unusually large number of eggs (also 11). That one was destroyed by a predator before I could determine the number and sex of adults in attendance.—BENEDICT C. PINKOWSKI, 60510 Campground, Washington, MI 48094. Accepted 27 Aug. 1974.

Some unusual nest sites of the House Sparrow.—The sites of 28 nests of House Sparrows (*Passer domesticus*) occupying barns and sheds on a farm in western Illinois were recorded during April and May, 1973. Half of the nests were in typical sites, such as under the eaves of buildings, but the other half were in more unusual sites. Twelve were in holes in the once-baled hay in a barn loft. The hay in the barn had been undisturbed for at least 5 years. Entrances to the nest cavities were spaces between boards in the floor of the loft (the ceiling of the main floor), so that the birds had to fly upward to enter. From there a narrow opening extended from 5 to 20 cm horizontally into the hay until it opened into a 10 cm diameter nest chamber. The chambers were lined with feathers and dry grass other than the original hay, but the added material was scanty in comparison with normal nests. The digging of the nest holes in the hay may have been done by rats (*Rattus norvegicus*) or by the sparrows. Sparrows have been reported excavating a nest hole in a rotting tree branch (Philipson, Br. Birds 32:17, 1938). No previous reference to House Sparrows nesting in hay bales has been found.

House Sparrows had also modified and occupied a nest of a Barn Swallow (*Hirundo rustica*) and a nest of an American Robin (*Turdus migratorius*). Similar instances have been previously noted (Bent, U.S. Natl. Mus. Bull. 211, 1958). The Barn Swallow nest we observed was on a joist and was at least a year old and unoccupied when the House Sparrows began modifying it. Large amounts of grasses, feathers, and other materials were added inside and outside until the original diameter was trebled. A dome was constructed over the top, leaving a small entrance at one side.

The robin nest was on a purlin about 20 cm beneath the roof of the barn. Robins had been incubating for 6 days. On the 7th day, grasses and one House Sparrow egg had been added to the robin nest; we never saw the robins at that nest after the first sparrow egg appeared. An additional House Sparrow egg was laid in the nest on each of the next four days, after which the nest was deserted. No dome was constructed over the nest and no lining materials were added to the inside. The sparrows may have been attracted to the open nest due to the roof boards forming a ceiling about 13 cm above the nest rim.—ERICA WERLER AND EDWIN C. FRANKS, Dept. of Biological Sciences, Western Illinois Univ., Macomb, IL 61455. Accepted 23 Sept. 1974.

Soaring vultures use a dust devil to gain altitude.—An observation during the afternoon of Sunday, 18 July 1965 suggests that large birds are aided by visual perception of thermal air columns. I was driving north of Oklahoma City in a search for dust devils as objects of motion picture photography. The whirls are clearly visible when