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# A Baltimore Oriole Census

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#### A BALTIMORE ORIOLE CENSUS

#### KATHERINE GILMORE AND H. E. JAQUES

The question with which this article is concerned is one that was under discussion in the Ornithology Class at Iowa Wesleyan College. The original problem was to discover how many pairs of Baltimore orioles nest yearly in the town of Mount Pleasant where the college is located. As the investigation was carried on and interest deepened, the scope of the problem was enlarged somewhat to include a study of the determining factors in an oriole's selection of a nesting place. When the problem was first undertaken, the town, which has a population of about four thousand and covers an area of one and one-fourth square miles, was divided into six districts of about equal extent and two students were appointed to search each district for orioles' nests and to note the species of tree in which they were found. This work was done in February, and, as there were no leaves on the trees, each swinging pouch was quite conspicuous and the matter was not one of great difficulty. The complete report was as follows:

KIND OF TREE	Number	of Nests
Soft Maple		60
White Elm		40
Box Elder		10
Hickory		5
Cottonwood	<i>.</i>	3
Hard Maple		2
Hackberry		1
Apple	<b></b>	1
Walnut	<i>.</i>	1
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The fact that but two-thirds as many nests were found in elms as in maples seemed worthy of investigation since all available bird literature advanced the opinion that the oriole preferred an elm tree. In this matter the Botany Class assisted with a census of the elms and the soft and hard maples six inches in diameter or larger in Mount Pleasant. This second census was as follows:

KIND OF TREE	Number of Trees
Soft Maples	1392
Elms	814
Hard Maples	817
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When this report was investigated it appeared entirely logical that these orioles had built in the soft maples, even though their natural preference might still have been for the elm, for in some parts of the town no elms are found for a few blocks. It was also interesting to note that although the number of hard maples practically equalled the number of elms, there were but two nests found in hard maples. The orioles evidently chose the widespreading trees, and in almost every case they hung the nests at the very end of a flexible outer branch.

As it was thought possible that the nests might have been hanging for several seasons, each student concerned in the census taking was asked to use his own judgment in determining whether or not the nests were more than one year old. It was the general opinion that about one-half of the nests counted had been built during the preceding summer as they seemed to be in quite good condition, and the conclusion was drawn that between fifty and sixty pairs of Baltimore orioles nest yearly in Mount Pleasant. The other half of the nests appeared to be of two or three years' standing. Most of the third year's nests had probably disappeared entirely but several cases were reported where in one tree three nests were found; one very old and almost weathered away, one less battered but still showing wear, and one in good condition. They evidently represented three years' residence, and demonstrated the fact that orioles come again year after year to any favorite locality.

Later in the season, after the returned orioles had nested and the young broods had been reared the search for nests was renewed with the hope that perhaps four seasons' nests might be found together. However, though considerable time was spent in this search, it served chiefly to demonstrate the advisability of hunting orioles' nests during the winter months. The birds show admirable skill in concealing their nests from the casual observer. One new nest was obtained which hung from the lowest branch of a hackberry tree thirty feet directly above the side walk. It was cut down, and its structure and materials were examined. Its outer walls were made chiefly of silklike plant fibers interwoven with a few black horse hairs, and it was hung by loops of the same material from two small branches at the end of the limb. Its interior measured five inches in depth and about three inches in width. Its upper walls were thin, soft, and pliable, but the bottom was an inch and a half thick and very of numerous compact layers of different materials, ranging from coarse grasses in the lower layers to the soft down from weed seeds which made the upper lining layers.

This nest and most of the others were found within the residence districts of the town near the most frequented streets, but several blocks from the business section. Noise does not seem to bother the orioles for in one case a nest was found swinging from a low branch of a big maple not ten feet from a railroad track where a local train which passed twice a day must have caused great excitement among the young birds. The orioles seem to seek human companionship, for a vain search was made for nests in a quiet grove of old elms and maples near the edge of town which seemingly should have been an ideal nesting place. Moreover the woods around the town seemed neither to be chosen as nesting places, nor to be frequented by orioles after their return, from which facts it was inferred that the rural orioles prefer the big shade trees in the farmyard to the solitudes.

One nest was found which was notably different from the others, and which must have belonged to a very eccentric oriole family. It was hung in the woods, almost a mile from the nearest residence and in a very unfrequented place. It was also the only nest reported as being built in a sycamore tree. But its location in the tree was the most peculiar thing about it. It did not swing from a low outer branch as the other nests did, but it was placed in the very top of the tree and fastened to three small branches so that it hung in the fork that they formed. As this nest was located while occupied there is no question of correct identification.

The comparatively small amount of work which was done raised numerous most interesting questions which the limited time and opportunity made it impossible to answer. Whether the orioles that nest in one town or community during one season generally return to it during the next, whether young birds return the next year to the locality in which they were reared, are questions which might all be answered in a few years by careful banding of the young orioles in a few nests. Concerning the nest itself such questions arise as whether or not both birds are employed in the building, what different kinds of material they will use, how far away they will search for them, and to what extent their choice of materials may be governed by supplies provided for them. A season's watchfulness would answer these questions and might also reveal the secret of how the mother bird

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manages her household so successfully that at the end of a busy summer she leaves the abandoned home specklessly clean and tidy.

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