

boards are more attractive than those made of new lumber. Again, the odor of fresh paint is no more pleasing to birds than to human beings. All joints should be made square and tight to guard against drafts and rain.

Blue birds are among the early comers. The house must be wide and deep enough to provide sufficient space to permit the young birds to mature fully before being obliged to leave the nest. That means floor space of about 5 in. x 5 in. or even 6 in. x 6 in., and a depth of from 6 in. to 9 in. The opening should be placed 5 in. or 6 in. from the floor and be from $1\frac{1}{4}$ to $1\frac{1}{2}$ in. diameter. It is not necessary to provide a perch as the parent birds readily enter by holding on with their claws. The house may be built with a gable roof or a sloping shed roof. Boards taken from packing boxes serve well as material. A rustic effect which the birds seem to like is easily secured by splitting small saplings in two and nailing these halves side by side to the walls of the house until the entire surface is covered. Since blue birds frequently rear two or even three families during a summer it is advisable to plan the house so the top or one side can be removed for cleaning purposes. The cleaning should be done as soon as the young birds have all left the nest. The house should be firmly fastened to a pole and set up so it stands eight or ten feet from the ground with the opening facing east or south and away from the prevailing wind and rain.

Wrens have built in all manner of places, but a house measuring 4 in. x 4 in. on the inside and from 5 in. to 6 in. deep is very welcome. The opening should be from $\frac{7}{8}$ to 1 in. in diameter. If made larger sparrows can enter and very easily destroy the eggs or young. It is better to have the house too large than too small, since the housekeep will carry in tiny sticks and straws until just the right amount of room is left to rear the family. If the house is made too small, this filling-up process is curtailed, but the youngsters are forced to leave home too early to be able to fly or take care of themselves. Set the house on a pole, or nail it under the eaves of some building.

Blue birds and wrens are not sociable. They do not welcome other bird families in the near neighborhood. It is therefore useless to build a two-family house for them, or to place two houses within a short distance of each other.

Martins love company and prefer a colony house. This is made by placing partitions in a box so as to divide it into several rooms. Each room should not be less than 6 in. x 6 in. in size and 6 in. or more in height. The opening must be large enough so that the bird does not fill the space when entering. In other words, allowance is made for entrance of light since the bird seems to avoid entering a dark place. The opening should be $2\frac{1}{2}$ in. in diameter and be placed about eight inches from

the floor. The house should be placed on a high pole 12 to 15 feet from the ground.

Robins make use of nesting shelves placed in trees, on telephone poles, or the side of a building. These shelves may be closed on one or two sides only. The idea is merely to provide a safe place for the robin to build a nest.

Bird houses should be set in place before the birds arrive from the South land, so that they are ready for inspection when the tenants arrive. Protection must be given against cats, sparrows and sometimes boys. If safety from enemies is given, the houses will be occupied as the builder's reward, and a splendid opportunity becomes available for the study of bird life.

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THE NEEDS OF RURAL EDUCATION, I.

During the first week of 1920 Inspector Putnam of Ottawa discussed "Ontario's Biggest Problem" in a series of articles in the Toronto Globe. He formulated this problem as follows: "Can the depopulation of rural Ontario and the decline of the agricultural population be arrested, or at least lessened, by the reorganization of the rural schools of the Province?" Some such formulation might, also, be given as the biggest problem of each of the Atlantic Provinces. These Provinces lose population to the industrial centers of the United States and to the wheat fields of Western Canada. The first is a dead loss of population to Canada; the second is hardly more fair for the east of the Dominion is sacrificed to the expansion of the west. It is quite possible that one means of prevention may be found in the improvement of rural education. This problem together with the serious arraignment against our educational systems made by the high per cent. of illiteracy in these Provinces, are sufficient reason for a discussion of the needs of rural education.

With the increased consciousness of the necessity of adapting rural education to the needs of rural communities perhaps no more urgent demand could be brought to the notice of the public than that of the general improvement of school surroundings. The appearance of the average school-yard, barren, neglected and winnowed, is all too common to need any description. Too long have we failed to develop in the minds of the children a love for rural life and the beauties of nature, by neglecting the school and its surroundings where most of their childhood is spent.

Dean Bailey of Cornell University, in an address on the "Improvement of Rural School Grounds," asserts that: "One's training for the work of life is begun in the home and fostered in the school. This training is the result of a direct and conscious effort on the part of the parent and teacher, combined with the indirect result of