

well and is, under the conditions, all that he can be confident of? I would say that neither Mr. Munro or the above authors are specially singled out for this stricture as the practice is a well nigh universal one amongst ornithological writers. It is only by calling attention to an indefensible general practice that it can be corrected.

In GENERAL NOTES, p. 100-101, W. L. McAtee under title "Further Notes on the 'Fishy' Flavor of Birds", shows that this is not caused by the eating of fish. That fish-eating birds are not necessarily fishy in flavor and many species that eat little or no fish are often so characterized. He does not doubt that the food eaten influences the flavor of the eater but regards "fishy" in this connection as a loose term for flavors that have nothing to do with fish.

Under NOTES ON NORTH AMERICAN BIRDS, pp. 81-85, H. C. Oberholser discusses the proposed reduction of our American Green-winged Teal of subspecific relationship with the European form as endorsed by the Committee of the British Ornithologist's Union. He finds that the two are separated by constant characters and show no indications of intergrading. He, therefore, decides that the two are specifically distinct as at present regarded in our Check lists. On contrary grounds he supports Hartet's contention that the American Marsh Hawk is only superficially distinct from the European bird and should stand as *Circus cyaneus hudsonius*. Similarly he also lumps our Short-billed Gull with the Common Gull of Europe, calling it *Larus canus brachyrhynchus*. He also finds that the North-west Crow hitherto regarded as a distinct species intergrades with the Western Crow which is only sub-specifically distinct from the eastern bird. If this is demonstrable the North-west Crow will have to be called in future *Corvus brachyrhynchus caurinus*.

P. A. T.

FOOD, FEEDING AND DRINKING APPLIANCES AND NESTING MATERIAL TO ATTRACT BIRDS. By Edward Howe Forbush. The Commonwealth of Massachusetts. State Department of Agriculture. Departmental Circular No. 2. September, 1918.

In an attractive little pamphlet of 31 pages, with 30 figures, drawings, and halftone illustrations, Mr. Forbush gives an interesting summary of most of the successful devices which are being used by bird-lovers to attract birds to the vicinity of their city homes and country estates. First and foremost he recommends the elimination of the house cats. As extirpation of the neighbor's felines is not always practicable, he recommends enclosure of the yard by a cat-proof fence. The only always successful fence for this purpose is a fine-meshed wire netting 6 feet high, with a fish-net suspended

from slim poles at the top. Tangles of vines and shrubbery are recommended as places of shelter and retreat for small birds.

The first and greatest need of birds, however, is food, and by judicious and systematic feeding many winter birds may be induced to come around the house and often become so tame that they will eat from the hand. Many birds' lives may also be saved by feeding at exceptional times in spring and autumn, when the weather is unusually cold or wet, or sleety, so that the birds become chilled and weakened and cannot find sufficient food. Whole grain, which can be used for human food, for farm animals or poultry, is unnecessary for small birds, but may be used for game birds. Where weeds are abundant, the smaller seed-eating birds need little else, but where weeds are kept down, or where they are covered with snow, other food should be provided. Many cultivated flowering annuals, such as asters, portulacas, California poppies, etc., bear seeds attractive to seed-eating birds.

Chickadees, nuthatches, jays, and some other birds are fond of nut meats, as well as fatty bits of meat, suet, skinned carcasses of small animals, and the like. Suet should be enclosed in crocheted bags, or tied to the branches of trees to prevent greedy crows or jays from carrying off the whole piece at once. Grits, sand, broken plaster, etc., are attractive to birds as an aid to digestion, and they sometimes have difficulty in satisfying their desires for it when the ground is covered with snow. Ground-feeding birds are often necessarily fed on the ground at first to accustom them to food receptacles, but ground feeding is wasteful, the food being spoiled by rain or covered by snow and ice unless it is under cover.

A feeding shelf or table may be set at a window on the south side of the house and supplied from inside, or a moving food-shelf may be hung on a near-by tree. The birds may be watched at close range from within if the window is protected by a sash-curtain. The weather-vane food house is considered the most perfect device for outdoor feeding, and should have a hopper on top that can be filled with seed. The weather-vane food house swings with the wind and always keeps the opening away from wind and storm. Various anti-squirrel and anti-sparrow devices are recommended to those who do not care to feed English sparrows or squirrels. For instance, two pieces of suet may be suspended by a piece of string. Native birds will readily cling and feed, but the sparrows find it difficult. The method employed by Mr. W. E. Saunders, of London, Ontario, is to pour melted tallow mixed with sunflower seeds upon a flat board with a perch to which the native birds can cling, the board being fastened up in an inverted position.