

seeds or insects per day x 150 days, bird season, equals 887,000 tons of pests destroyed each summer by our birds. (J. J. Golden.)

Birds also consume great quantities of weed seeds. Our winter birds—and we have 43 species—live principally upon weed seeds. The Juncos start in early on Russian pigweed, and the buntings, the redpolls, the winter grosbeaks, the jays and the sparrows. In Iowa, 10 sparrows to the square mile during the winter of 200 days, consume 875 tons of weed seeds. Forty species of sparrows in the United States are seed-eaters, 97 per cent of their food being weed seeds, 64 per cent of the food of the Mourning Dove is weed seeds, and 27 per cent of the Meadowlark's food is weed seeds.

Gophers and mice are bad, but they would be worse if it were not for hawks and owls; the hawks work by day and the owls by night. The Horned Owl will swallow a striped gopher entire. The bones and hair are then disgorged as pellets. Thousands of pellets are often found under the roosts of these owls. In the stomach of a young Horned Owl two weeks old, the remains of five mice were found. Three thousand skulls of gophers and mice were found in the retreat of a pair of Barn Owls. All the hawks are expert at catching young "Flickertails."

Our hawks are not as harmful as supposed. Thousands of stomachs of hawks have been examined by Fisher, King and Beal.

220 Red-shouldered Hawks: Less than 2 per cent poultry.

65 Broad-winged Hawks: No trace of poultry.

320 Sparrow Hawks: No trace of poultry, but 101 mice, 224 insects, 52 birds, 12 reptiles.

124 Marsh Hawks: Only seven contained poultry, and 79 contained mice.

Rodents are the natural diet of hawks and only the Sharp-shinned, Cooper's, Pigeon and Goshawk maliciously attack poultry.

The Great Horned Owl or Cat Owl is the only one which attacks poultry, all others during their nightly prowling are great destroyers of mice and voles.

Unfortunately, we have seen how readily the cankerworm can destroy the Manitoba maple and plant lice destroy the elm. No doubt the wholesale destruction of our native maple in the south-