

material was collected from 21 States, Ontario, and Mexico. Stomachs were obtained each month of the year.

"The insect food of the quail in comparison with that of other birds is interesting. It includes fewer caterpillars, ants, and other Hymenoptira, but more bugs, and, singularly enough, in a terrestrial feeder, nearly twice as large a proportion of beetles as of grasshoppers.

DOES NOT HURT STANDING CROPS.

"The meadow lark, per contra, another terrestrial feeder, takes 20 per cent. of grasshoppers and only 18 per cent. of beetles. In August the quail eats 44 per cent. of insect food. The grain taken is derived neither from newly-sown fields nor from standing crops, but is gleaned from stubble fields after harvest. The insect food is of extreme importance since it contains many pests that are generally avoided by other insectivorous birds, noteworthy the potato beetle, twelve spotted cucumber beetle, striped cucumber beetle, various cut worms, army worm, the clover weevil, imbricated snout beetle, May beetle, click beetle, the red-legged grasshopper and clinch bug, and it should be observed that in the search for these pests and for weed seeds, the quail, unlike many birds, extends its foraging to the centre of the largest fields, thus protecting the growing crops.

Some birds pull up sprouting grain and plunder the standing crop when in the milk. The quail, however, is a notable exception. Not a single sprouting kernel was found in the crops and stomachs of the quail examined. Field observations during the years 1899 and 1900 at the Marshall farm gave similar evidence, while crows injured sprouting corn so seriously during May that several extensive replantings were necessary. Quail, unusually abundant in the vicinity at the same time, were never seen to disturb the germinating grain. During November, 1899, sprouting wheat was saved from crows and blackbirds only by diligent use of the shotgun; but both then and in other seasons the quail were rarely observed in the Winter wheat fields and never seen to molest the crop.

IN THE STUBBLE.

The quail do no harm to the sprouting grain. They are persistent stubble feeders. Where fields of wheat stubble

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