support a rank growth of ragweed there the quail are to be found. It is not unusual to find 100 to 200 grains of wheat, gleaned from the stubble, in a crop. A quail shot at West Appomatox, Va., in December, 1902, had its crop distended almost to bursting with 508 grains of wheat. This habit of gleaning waste grain after harvest is beneficial to the farm, for volunteer grain is not desirable, especially where certain insect pests or parasitic fungi are to be combated. As scattered kernels are usually too far afield to be gathered by domestic poultry, the services of the quail in this respect are especially useful.

## EATING INSECTS.

During the breeding season a third of the food of the adult quail consists of insects, while their young, like those of practically all other land birds, consume a much greater proportion of insect food than do their parents. Droppings collected from two broods of downy chicks—one but a few hours out of the shell and the other probably several days old—consisted wholly of the remains of insects. Their fragmentary condition made the species almost unrecognizable, but the following were identified, under the microscope: Green leafcating beetles, leaf-eating beetle, small scarabacid beetles, longicorn beetles, ground beetles, weevils, grasshoppers, caterpillars, ants, stink-bugs, spiders, thousand-legs.

## EAT TONS OF WEED SEEDS.

An interesting estimate of the value of the quail was made up in Virginia and North Carolina, from Sept. 1 to April 30, the season when the largest proportion of weed seed is consumed. "We estimated four quail to each square mile of land, or 354,820 in the two States. The crop of each bird holds half an ounce of seeds, and is filled twice a day. Since at each of the two daily meals weed seeds constitute at least half the contents of the crop, or a quarter of an ounce, a halfounce daily is consumed by each bird. On this basis the total consumption of weed seeds by quail from Sept. 1 to April 30, in Virginia and North Carolina, amounts to 1,341 tons. It is to be remembered also that if it were not for foxes, hawks, and trespassing pot-hunters the birds would be far more abundant and their services correspondingly greater."