

# GREEN LAND, GREEN BACKS



*Adopt the pace of nature: her secret is patience.*

RALPH WALDO EMERSON

THE CHARACTER OF THE FOOD eaten by birds, insects, or animals decides their economic status. When the food of a bird consists of insects or mammals injurious to crops, forest trees, or other property, that bird is of service to man and therefore beneficial. A bird, animal, or insect is beneficial or injurious to the degree that harmful or useful foods are eaten or destroyed by it.

Their mode of locomotion, together with their structural fitness for their natural functions, make birds a very important economic factor in the animal kingdom, especially from the standpoint of their usefulness to man. Endowed with the power of flight, they speedily cover great distances, thus controlling outbreaks of insects or rodents in widely separated sections of country.

Aside from their destruction of noxious insects and animals, birds are useful as weed-seed destroyers, also as scavengers, and again are instrumental in the dissemination of the seeds of trees and other plants. The place of birds in nature is entirely unique. Each species performs a service which no other can so well accomplish; each is structurally modified for the particular work nature demands of it. These modifications, in such birds as the Crossbill, Wrybill, Spoonbill, and others, are very marked, giving them an unnatural and grotesque appearance, even to the point of deformity. In other species, various structural modifications in feet, legs, wings, necks, or other parts are

found, but always for the purpose of facilitating the specific task which each must perform.

### THE BALANCE IN NATURE

SO COMPLEX ARE THE FOOD HABITS of birds that they are little understood and probably never will be fully known. A species may be useful part of the year and harmful at certain other times; an active destroyer of insects within the breeding range may become a pillager of grain during migrations. Certain species, highly beneficial in normal numbers, become destructive when their numbers are greatly increased. The whole economic problem hinges on the balance that can be preserved in nature. An increased food supply would tend to increase the number of birds feeding thereon; when the supply is materially decreased, the birds must look elsewhere for food, and this may result in their becoming destructive.

### THE DESTRUCTION OF FORESTS

FROM THE BEGINNING OF TIME, the organic forces of nature have been engaged in constant conflict, each against the other, but maintaining on the average a stable balance until the advent of civilized man. In our own country this equilibrium was preserved until the Pilgrim fathers began to hew homes out of the virgin forest. Fields of maize and wheat supplanted the forest, affording an abundant supply of juicy, tender food to many insects that formerly were dependent upon the forest. The destruction of the forest has caused a steady decrease in the numbers of birds dependent thereon for protection, food, and nesting sites; this, with the destruction of many birds for food or other purposes, has greatly reduced this natural check on insect life. Many species have adapted their manner of living to the changed conditions, some of which find present conditions even more favorable than those prevailing formerly. Other species, native to the western plains, have, since the settling of the country, extended their ranges eastward.