

Owls.

By R. R. McLEOD.



As I have before, in another paper, remarked, birds have descended from reptiles. The evidence is entirely convincing from fossil remains, to say nothing of the testimony to be gathered from the embryology and structure of birds.

Two specimens of feathered reptiles have been discovered in Bavarian quarries. If it seems desirable in a future paper, I will tell the story of the evolution of the bird.

We are absolutely certain that the first birds were predaceous; they were not "cooing doves" nor tuneless thrushes, but toothed and clawed for fierce fray with flying reptiles, furnished with bat-like wings, with whom they disputed the dominion of the air in the Cretaceous times, millions of years behind us. Hawks and eagles are but modified descendants of those ancient marauders; so too, is a humming bird, but he is a side branch that could only be evolved when there were flowers stored with nectar, and that was a long stretch of more than a million years from the date of the Bavarian archeopteryx.

Owls are a specially modified group of day-hunting hawks, and as such, are of later appearance than other birds of prey. When most other creatures are locked in the embrace of sleep, and all are left in darkness, that is the time to get meat, provided

there are eyes that can still see, and ears keenly alert to the slightest noise. While the rule is that night is the time for sleep, still there are many species that are out for food in preference to the daylight, although they are not in search of prey. Such are hares, flying squirrels, wild mice, moles, moths, lions, tigers, leopards and other flesh-eating quadrupeds that have acquired a vision and hearing that enables them to successfully hunt the sleeping deer and other animals.

Owls are the feathered equivalents of these blood-thirsty beasts. They are an organic response to the opportunity that night offers to obtain food. "How small I be filled?" is the question asked by every living thing. Wherever there is a chance for a mouth to get a morsel, there is the hungry applicant with teeth, bill and snout, and hundreds of other contrivances to secure the coveted portion. *In* the soil, and *on* the soil; *in* the water, and *on* the water, and *in* the air. On poor creatures and in them are parasites, and

"Big fleas have little fleas upon their backs to bite 'em,
And these again have other fleas, and so on *ad infinitum*."

In the very long ago, some birds of prey found it advantageous to be out late in the "drape of the day," as Walt Whitman has it. They were provided with eyes slightly better for night work than their fellows.

Organic peculiarities pass by the action of laws of inheritance to the offspring; habits are also inherited. In the strenuous and ceaseless struggle for food, the feathered night prowlers were set apart as a highly specialized group, adapted in every way for the prosecution of their business in life. Eyes, ears, claws, plumage and bills, have been modified for nocturnal use. They pounce upon sleeping birds, and feeding hares, on mice and frogs. No member of this suborder is clothed in brilliant plumage, and the colors of the sexes are alike. "All the red, and blue, and green, and yellow, and bronze feathers have been secured for protective purposes to mimic surroundings, or have resulted from the females selecting for mates, the most highly colored suitors. At night, a bright plumage would be dark, and could therefore serve no better purpose than brown or black." Owls choose their partners at a time of day when pretty color-schemes would not be likely to catch the eyes of these females in search of a mate, and therefore sexual selection could play no part in this group of birds.

We have, as rather rare natives, two species of