Science Plus Imagination . . .

THE PROBABLE COLORS OF PREHISTORIC BIRDS

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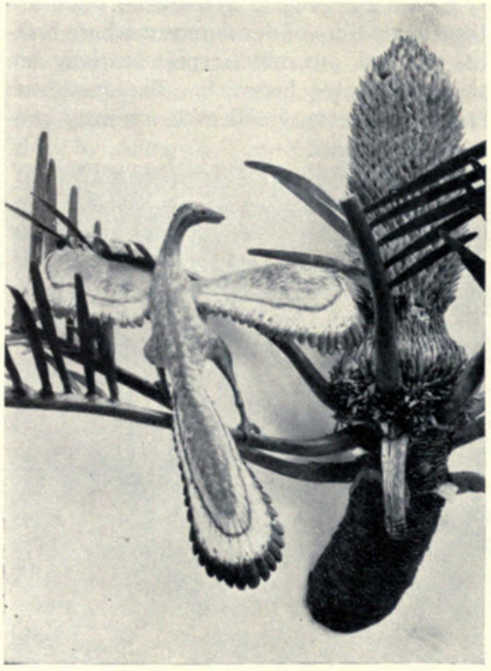
Birdwatchers of today can broaden their experience and learn the distinctive characters of the earliest known species by visiting the exhibit of fossil birds in Hall 21. Plaster models and full-scale reproductions of primitive birds that inhabited the world millions



ARCHAEORNIS
Earliest known bird. It lived in Bavaria about 135 million years ago.

of years before man have been reinstalled with life-like colors that are believed to approximate the original appearance.

How can one determine the colors of birds known only from fossil remains? In the absence of feathers the researcher seeks a clue in the colors and patterns of surviving relatives of the prehistoric bird and thus tempers imagination with probability. The primitive characters retained by the young of modern birds sometimes suggest correlations, and others may be found in the habits of related species.

EARLIEST OF BIRDS

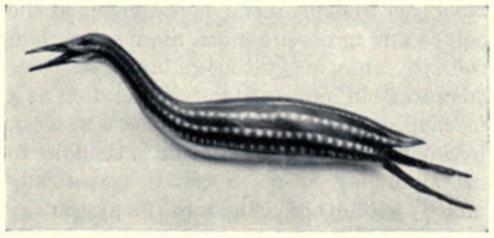
Archaeornis, the earliest known bird, lived in the cycad forests of Bavaria about 135 million years ago. Today no one can determine the color of its plumage with certainty, for no living bird resembles this primitive ancestor. Nevertheless, its reptile-like teeth, functional "fingers," and long-jointed tail, and the nature of its habitat, suggest that *Archaeornis* might well have been brightly colored like certain present-day tropical lizards. The Museum's model is colored blue and brown, after Gerhard Heilmann's famous illustration.

Somewhat less nebulous were the colors of *Icthyornis* and *Hesperornis*, beautifully adapted fish-eating birds that inhabited North American seas approximately 100 million years ago. Both species had teeth, but otherwise they resembled birds of certain existing families. We know from its fossil remains that *Icthyornis* was a bird of strong flight and tern-like structure; so it is reasonable to suppose that its plumage was also similar to that of its present-day counterpart. In like manner, the spotted plumage of immature grebes is a primitive character that offers a clue to the probable appearance of that flightless ancestor, *Hesperornis*, the most nearly aquatic of all known birds.

ACTUAL FEATHERS FOUND

Several terrestrial species of massive structure that became extinct millions of years ago during the Tertiary and Quaternary Periods are also reconstructed in Hall 21. Birds of this type are represented today by cassowaries, emus, and ostriches. Since existing relatives are predominantly gray, black, or drab brown, it is believed that their primitive ancestors were similarly camouflaged. Remains of the giant moa (*Dinornis*) of New Zealand, a fairly recent fossil, tend to support this theory. Feathers as well as bones of the moa have been found; so there can be little question as to the appearance of this form and its relatives.

Also exhibited in Hall 21 is a reconstruction of the famous Mauritius dodo. This strange bird became extinct in 1681, but several fragmentary specimens fortunately are preserved in museum collections. Dodos appear in many Flemish tapestries of the period, and paintings by contemporary artists indicate that the Mauritius Island species was a bird of considerable beauty.



HESPERORNIS
Completely flightless, it was the most nearly aquatic of all known birds.

The Museum's full-scale model is displayed with copies of early illustrations reproduced in color.

Meteorites Consumed in Passage

Most earth-bound meteorites are completely destroyed during their passage through the atmosphere, and fail to reach the ground. Those that actually strike were much larger when they reached the upper confines of the air than they were upon landing.

EXHIBIT OF STUDENT ART FROM MUSEUM CLASSES

An exhibition of pastels, drawings, and paintings by the students of the Art Institute Junior School will be featured at Chicago Natural History Museum from May 1 to 31. These students range in age from about eight to seventeen years. The work is done directly from the Museum exhibits, which constitute a wealth of information, source material, and inspiration. The young artists are given freedom to choose any subject, and it is interesting to note the variety of the subjects included in this particular exhibition.

The sketching of plant and animal forms in Museum exhibits, shown as they are in nature yet under what amounts virtually to studio conditions, is but part of the many advantages offered young art students. They also have the opportunity to discern and study the antecedents of many art forms in the extensive ethnological exhibits of the Museum, particularly those of South Seas and African cultures.

Some of the exhibited items are naturalistic representations of animals, plants, and other material found in the Museum; others are impressionistic in type following various modern trends but still having their inspiration or basic design originating from Museum material. The work is notable especially for the colorful treatment most of the children give to their productions.

The Museum provides a classroom in which the group assembles, and folding chairs for student use in exhibition halls. Other classes of the Art Institute also visit the Museum periodically as part of general course work for adult students toward degrees in art.

STAFF NOTES

Miss Margaret Bradbury has been appointed to a post as artist in the Department of Zoology. . . . **Mrs. Genevieve Highland** has been appointed as assistant to **Miss Lillian A. Ross,** Associate Editor of Scientific Publications. . . . The Sociedad Malacologica "Carlos de la Torre," Museo Poey, Universidad de la Habana, Cuba, has elected **Dr. Fritz Haas,** Curator of Lower Invertebrates, an honorary member.

Reptile Collecting in Texas

Mr. Karl P. Schmidt, Chief Curator of Zoology, is conducting a field trip in southwestern Texas to collect amphibians and reptiles. He is accompanied by Robert F. Inger, an assistant in the Division of Reptiles; Mr. Schmidt's son John is also a member of the party. While in the vicinity of San Antonio they plan to attend the spring meeting of the Texas Herpetological Society.