

ORNITHOLOGY

Study Bird's Courting

Recent studies of the courting behavior of the unusual bowerbirds have given scientists important clues as to their evolution.

► A BIRD that flaunts his feathers before the female of his choice may be fairly low down on the evolutionary scale.

He might do better with a bright berry or two.

One study of bowerbirds indicates some of these birds have progressed from colorful feathers to colorful objects. One species in which the male has a bright crest on the nape of his neck goes through courtship motions that display the iridescent, lilac, silver-tipped crest. Another species, however, tries to attract the female bird's attention with a bright colored object, such as a piece of glass, a pebble or a spray of berries.

According to one theory, the male bird's bright crest can be lost as a secondary

result of the transfer of sexual signals from feathers to objects. Now observations of two bowerbirds seems to support this theory, E. Thomas Gilliard of the American Museum of Natural History reported.

Although the crestless male, the Fawn-breasted Bowerbird was the one Dr. Gilliard studied, lacks showy neck feathers, the bird still "twisted its neck in a most unnatural way so that the back of its head was aimed towards the female." As the courtship progressed the bird depended more on displaying with colorful objects.

Apparently, Dr. Gilliard pointed out, even the crest-displaying movements have been re-directed to berry-displaying movements. While the movements have persisted, they have become vestigial.

In another report appearing in the publication, *American Museum Novitates* (April 22), Dr. Gilliard describes what is believed to be the first observation of courting behavior of Sanford's Bowerbirds.

When the female comes to the bower (a mat of ferns and vines decorated with snail shells, resins and strands of gold-colored bamboo), the male assumes an infantile attitude. Its body is flattened and it chews, fluttering its wings like a young bird waiting to be fed. The female remains on low perches encircling the bower.

The advantage of this display is unknown, Dr. Gilliard said.

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BIRD COLLECTION—More than 5,500 birds from the Indian continent have been collected by Harvard University zoologists Dr. Raymond A. Paynter Jr. (right) and Melvin L. Bristol. Mr. Bristol holds a crow while Dr. Paynter holds a hornbill. The large bird in the foreground is a stork. Yale University's Peabody Museum and Harvard's Museum of Comparative Zoology were co-sponsors of the expedition. Birds and other animals collected will be shared with the countries where they were collected. (This photograph is not related to the preceding story on bowerbirds.)