

Chicago Natural History Museum

FOUNDED BY MARSHALL FIELD, 1893

Roosevelt Road and Lake Shore Drive, Chicago 5

TELEPHONE: WABASH 2-9410

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Members are requested to inform the Museum promptly of changes of address.

HORNBILL WIVES WALLED INSIDE TREE-NESTS

By AUSTIN L. RAND
CURATOR OF BIRDS

FOR A LONG TIME it has been written that the male hornbill walled up his mate in her nest in a hole in a tree at nesting time, and one author even wrote that the male plucked out the female's feathers then. Even though the facts underlying these statements have different interpretations, the life of the hornbill is still strange enough. Travelers and naturalists in Africa had brought back tantalizing bits of information to add piecemeal to our knowledge, summarized by R. E. Moreau, the noted naturalist.

First, we must not say "the hornbills," for there are Asiatic and Malayan species as well as African. Further, African species differ amongst themselves—notably the ground hornbill, which acts quite differently from the others.

It is quite true that in many African species the female is walled up in her nest and this period when she is enclosed may last three to four months. But it's not an imprisonment forced on her by the male, and presumably she could, if she wanted to, open the entrance at any time—as she does, finally, on emerging.

With the African hornbills the details vary with the species, but the nest is usually located in a hole in a tree and, except for

Museum Members' Night October 10 . . .

A STAGE SHOW IN AMERICAN INDIAN COSTUMES: 'OPEN HOUSE,' AND A SPECIAL EXHIBIT

THE EVENING OF FRIDAY, OCTOBER 10, has been designated as Museum Members' Night. All Members of the institution and their guests are invited to attend "open house." Admission will be by presentation of membership card or the invitation that will be sent to Members at an early date.

Features of the evening will include a "fashion show" of American Indian costumes in the James Simpson Theatre; a special exhibit of two remarkable collections of Indian dolls; a preview of the first half of a newly reinstalled Hall of the Plains Indians (Hall 6); and visits to the work-rooms, laboratories, and studios of the scientific and technical staff on the third and fourth floors of the Museum normally not open to the public.

"Open house" will begin at 7 P.M., but the exhibition areas of the Museum will be open at 6 P.M. For the accommodation of those who wish to come early and prefer to dine at the Museum rather than go home or to the Loop, the Museum Cafeteria will begin serving at 6 P.M.

The Theatre show will run from 8:30 to 9:30 o'clock. About thirty young women, garbed in the costumes of various tribes,

will participate. The show will be staged by Eric Douglas, Curator of the Department of Native Arts at the Denver Museum of Art. This is an elaborate production that has received great acclaim in previous presentations at museums in other cities.

One of the most popular features of Members' Night last year was the opportunity to tour the studios, laboratories, and work-shops of scientists, preparators, and technicians on the Museum's third and fourth floors. This feature will be repeated on this occasion and again the members of the staff in each department and division—chief curators, associate curators, assistant curators, taxidermists, artists, plant-reproduction specialists, and other assistants—will all be on hand to greet Members and to explain various phases of the work of preparing exhibits and conducting research. The Museum will remain open until 10:30 P.M.

the ground hornbill, the entrance is plastered up so that only a narrow slit is left, about wide enough for the passage of the bird's bill. The female takes an active part in the walling up of the opening and might be said to wall herself in. When the opening to be filled is wide, the male may bring earth, which he mixes in his gullet with saliva and presents to the female who does the actual plastering. In some species the walling up of the entrance may take months.

The female may wall herself in for some days before she lays her first egg. Throughout incubation she remains there. Depending on the species, she may peck her way out or burst out when the young are partly grown, or she may stay until the young are ready to fly.

During the time the female is walled in the male brings food for her, and later for the young also. That he is a good provider is indicated by the fatness of the female and her young. This is proverbial with the natives (who probably have a culinary viewpoint). The method of feeding varies with the species. The male may bring a bit of food in his bill, pass it in to the female, and then go for more. Other species, which we might think more intelligent, carry berries in their gullet, regurgitate them one by one, and pass them to the waiting female. These species make trips to the nest less frequently.

Apparently shortly after the female goes into the retirement of her walled-in nest, she quickly molts all her flight feathers so that

she is flightless, and then she begins to grow them again. When the female bursts out of the nest, the young, only partly grown, replaster the hole using remains of food and rotten wood. Perhaps only half-way through their nestling period they thus wall themselves in. The female then helps the male care for the young.

Such is an outline of what some of the African hornbills do at nesting time. This conduct is unique in the bird world. Details differ from species to species, and one species



appears not to wall up its nest. In an Asiatic species it is said that if the male is killed other hornbills help to feed the female in her retirement. It is an amazing behavior pattern and an improbable one in that it is difficult to find a functional explanation for its development.



Rand, Austin Loomer. 1952. "Hornbill Wives Walled Inside Tree-Nests."
Bulletin 23(9), 2-2.

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