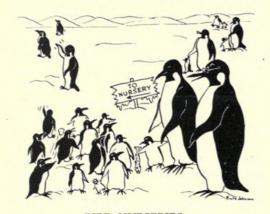
THE BIRD PAGE . . .

FEATHERED 'BABY SITTERS' AND CO-OP NURSERY-NESTS

BY AUSTIN L. RAND CURATOR OF BIRDS

Co-operative nurseries appear even in the bird world. In these, a few parents look after the young while the rest of the adults can go about their other affairs, freed of the care of their offspring.

The wild turkey of our eastern United States commonly steals away singly to lay



BIRD NURSERIES

An example of co-operation in the animal world.

Cartoon by Ruth Johnson

its eggs and incubate them in its nest on the ground. But occasionally it happens, Audubon writes, that several hen turkeys associate, lay their eggs in one nest, and raise their young together. With the turkey, apparently there is little division of labor. Audubon writes of finding three hens sitting on 42 eggs, but he says that one of the hens is always on the watch at the nest so that natural enemies have no chance to rob it.

A GREGARIOUS BIRD

What is of only occasional occurrence in one species may be the regular course of events in another. With the ani, we find it customary for a number of birds to nest together. The anis are moderate-sized cuckoos that live in the tropical Americas. The smooth-billed ani is perhaps the best known, as a result of research by Dr. D. E. Davis of Johns Hopkins University, who, when studying at Harvard for his doctor's degree, made a special trip to Cuba to study them in the field.

The smooth-billed ani goes in flocks the year round. Usually there are about seven birds in the flock, but there may be as many as twenty-four. The nest is a bulky structure of twigs and fresh leaves. When nest building starts, one bird is usually most active, but as many as five birds have been seen carrying in sticks at one time. When the nest of sticks and leaves is finished, several females may lay their eggs in it. But apparently only one bird incubates at a time, and the male takes his turn at incubating. When the young hatch, after

about thirteen days, most of the adults in the colony help feed the young.

Eider ducks may nest in dense colonies, but each bird has its own nest in which it lays its own eggs and in which the female alone incubates. After the young hatch and the mother leads them to the water, the young may band into larger flocks, accompanied by a number of females, though each duckling seems to be independent of its particular parent and attaches itself to and is tended by the nearest duck.

PENGUIN SOCIAL GROUPS

A much more elaborate system for caring for the young has been evolved by the Adelie penguin. These birds make their nests in scoops in the soil, lining them with stones, and there they lay and incubate their two eggs. The sexes alternate in their care of the eggs and of the young in their early stages. But when the young are partly grown the family unit breaks up for a communistic type of social organization. The young are then grouped into bands of up to twenty or more birds and are left under the care of a few old birds while the rest of the adults go to the water, which may be some distance away. Periodically they return with food for the young. Apparently an individual "child" is not recognized by the parent, but the parent goes to the particular group of which its young make a part and there may feed any one of the "child

Here we have two definite cases of a social organization that has resulted in division of labor: in the incubation of the ani and in the care of young penguins. In addition we have in the conduct of the wild turkey and the eider duck two less specialized cases of the same thing, showing the sort of raw material on which evolution can operate to produce new behavior patterns.

A Curator's Adventure . . .

UNPACKING BIRD-SKINS FROM NEGROS ISLAND

A shipment of birds from the Philippines recently arrived at Chicago Natural History Museum. The receipt of a collection is always an important event in the Division of Birds as in any department of the Museum. With hammer and pinch bar the lids were pried off the cases, and the cartons and packages inside were eagerly opened. The Division of Insects was told that there was a tin box of beautiful big atlas moths. Monkey, pig, and rodent skins and skulls went to the Division of Mammals across the hall. Then we began to unwrap the paper cylinders in which the birds had been packed.

These are the moments of discovery. We have all spent long days in the field on expeditions, collecting our 10 or 15 or 20 birds a day. We know how much work goes into

these collections and that only at rare intervals does one find new, rare, and interesting birds. There are stretches of barren days in between. Now, in the course of a half day, we experience all the thrills of a whole expedition. The results of months of collecting are wrapped in the paper cylinders in front of us. Every ten birds or so unwrapped represented a day of collecting in the jungle.

In our hurry to get this shipment unpacked, for after all it is only one of many shipments we receive, we have no time to identify and compare them all. That will come later, in working up a report on the collection. Now we are interested in getting the birds laid out in our trays and into our filing cases in the bird range where they will be safe and ready for study.

But we pause now and then to marvel at the beauty of the bewitching markings and variety of red and iridescent blues and purples of the many tiny sunbirds; to note the brilliant golden orioles or the black and yellow chickadee that recalls our local species but is strange, as though in masquerade dress; to comment on the prevalence of blue coloration in the many flycatchers of the Philippines. There is a greenish babbling thrush with orange tufts on its head, and we are pleased to see the strange red comb on the head of a water crake. But we are not fooled by all this brilliance into thinking that these forms are "new to science." We know it's unlikely that such conspicuous things should have escaped previous attention. The row of little olivegreen birds, female sunbirds, flowerpeckers, white-eyes, and warblers probably contains more secrets yet unsolved than all the brilliance of the more bizzare forms. The green pigeons are striking, but does the series of dull brown doves represent two species, as is usually thought, or are they really three closely related ones? A nightjar may be a new record; a swift surely is. Several babblers are certainly at least new to our collection.

But these are things to be worked out later, after the collection is sorted and catalogued. Now we're interested in the fact that there are 433 specimens, that the avifauna seems well represented, and that the specimens are well prepared and labeled. The collection will add many species to our collections and provide welcome material for research. This shipment is part of a series of such shipments from Negros Island in the Philippines, where Dr. D. S. Rabor, of Silliman University, is making the collection while he is studying the fauna of the island.

A.L.R.

Observe always that everything is the result of change, and get used to thinking that there is nothing Nature loves so well as to change existing forms and to make new ones like them.

—Marcus Aurelius



Rand, Austin Loomer. 1952. "Feathered 'Baby Sitters' and Co-op Nursery Nests." *Bulletin* 23(5), 4–4.

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