

# Airplanes and Monkeys Rivals as Noise-Makers

Following are reported some of the interesting papers presented at the recent Washington meeting of the American Ornithological Union.

The howling monkeys of the Canal Zone cherish deep resentment against airplanes. It is the first time they have ever encountered a serious rival in the production of noise, Dr. Frank Chapman, of the American Museum of Natural History, told the Union in reporting the activities of the station for the study of wild life at Barro Colorado Island in Gatun Lake.

"If a coat of arms is ever devised for Barro Colorado," said Dr. Chapman, "it should show several howling monkeys shouting furiously at an airplane."

This tropical laboratory offers unique opportunities for the study of birds and animals under undisturbed natural conditions. It is the only place where the flora and fauna characteristic of the American continents in the tropics can be studied within the jurisdiction of the United States. Since all the rest of our tropical possessions are islands, having their own characteristic types of animals, Barro Colorado presents special advantages to scientists interested in the tropical wild life of the continent.

The island, which is really a headland of the mainland cut off by the backing up of waters reserved for the locks of the canal, is teeming with birds and animals of the most diverse forms. "On a single morning," said Dr. Chapman, "I observed passing before my door any number of coati, (a small animal about the size of a raccoon) a little flock of peccaries, a procession of howling monkeys and the Duke and Duchess of York."

As a result of his observations on the island, Dr. Chapman has reached the conclusion that the turkey buzzard's unerring instinct for locating carrion is due to a phenomenally keen sense of smell as much as to the sense of sight.

The famous ornithologist is particularly interested in the study of the habits of the tropical relative of the Baltimore oriole. Careful observation of a colony in the tree-tops revealed the fact that the females build the long pendulous nests quite unassisted and vie with each other for the favors of the polygamous males. Only seven of the latter were counted in a colony of 42 females.

A tiny humming bird nesting in the same neighborhood with the orioles was discovered to be dominating the whole tree. Regardless of her minute size, the orioles many times bigger were observed to be giving Mother Humming Bird, with her sharp beak, complete right of way.

## Storks Find Way South

Young storks know the way to the winter stamping grounds of their race whether they have a leader to show them the way or not, German scientists have found.

Studies with the birds that show that the migratory instinct manifests itself in storks regardless of outside influences were reported to the Union by Dr. Theodor G. Ahrens, an American ornithologist living in Berlin.

Young storks with wings partially clamped down to prevent flying and fitted with identification bands, were kept in a marsh near Rossitten, East Prussia, by Prof. A. Thienemann of the Christian Albrechts University of Kiel. When the migrating season approached the birds were kept in cages until all the storks in Germany had flown south. Then they were carried back to the marsh and released. Reports of their band numbers, received from ornithologists in various parts of East Prussia who had picked them up, showed that they had followed more or less the customary route south without the guidance of leaders.

By December one of the birds was shot at Keratea, not far from Athens, Greece. The Greek police had some difficulty, Dr. Ahrens reported, in inducing the hunter to give up the bird's leg band because he wanted to keep it as a talisman. Some twenty other storks were seen in the same region at the same time. This report indicates that the leaderless storks while keeping to the south had veered to the west instead of taking the usual route to Africa by way of Asia Minor and Palestine. In spite of having been forcibly detained beyond the customary time for migration when the chance came, Dr. Ahrens pointed out, the birds knew what to do and did it.

Prof. Thienemann repeated the experiment on a larger scale during the fall of this year but returns have not yet been received to indicate the route by which the second lot of storks eventually found their

way south. The large quantity of food that storks require, estimated by Prof. Thienemann as over a pound of fish, frogs and insects per day, is thought to be one reason for the decrease in the numbers of these birds. Drainage of marshes and the growth of cities makes it more and more difficult for them to get food. The systematic use of poison to kill insects in South Africa has also resulted in the death of many more storks, who eat the poisoned insects for food while sojourning in their southern range.

## Cowbirds "Borrow" Nests

An attempt to trace the evolution of the bad habits of the cowbird, the social parasite of the bird world, has been made by Herbert Friedmann of Amherst College. The cowbird's eggs have been found by Mr. Friedmann in the nests of as many as 195 species of birds.

A whole series of South American relatives of the common cowbird show different stages of the practice of getting other birds to bring up their offspring, Mr. Friedmann reported recently to the American Ornithologists' Union. One species of Argentinian cowbird has the parasitic habit only developed so far as it affects the use of nests. They have delayed their breeding season so late that they can occupy the nests built by other birds earlier in the season. Though, unlike the cowbird of the north, they incubate their own eggs and rear their young themselves, they will not make a nest of their own if they can possibly help it.

Another species preys on this variety and attempts to possess themselves of the habitations in which their cousins are squatting, but as Mr. Friedmann pointed out, their choice of birds to disposses is probably limited because no others set out to raise families so late in the year.

In Central America still another variety of cowbird has a preference for the nests of its near relatives, the orioles. Others show great wastefulness in disposing of their eggs, several clubbing together to fill up an alien nest with 25 or 30 eggs, Mr. Friedmann declared. The original owner evacuated long before this number was laid so that none were hatched.

It would appear that, for complete

*(Just turn the page)*

### Ornithological Meeting

(Continued from page 359)

efficiency in getting other birds to hatch and rear their young, none of the South American types observed by the Amherst scientist approach the rascality of our native cowbird.

### "Wrenograph" Checks Birds

An elaborate electrical device on the order of a potentiometer has enabled S. Prentiss Baldwin, director of the Baldwin Bird Research Laboratory, to tell exactly how much time Mother Wren spends on the nest incubating her eggs and how much time she takes off.

Thirteen minutes appears to be about the average length of the time she can stick on the job but she seldom stays off longer than six minutes. Almost always she broods her eggs all night during the nesting period, though Mr. Baldwin has a record of one flighty female wren that went out for the evening at 8:50 p. m. and did not return until 1:04 a. m. During the last three days of the incubation period the absences are much less frequent but of about the same duration, the ornithologist has found.

The wrenograph, as Mr. Baldwin has christened the instrument, is an thermoelectrical apparatus connected with the electric light circuit that registers the temperature apparatus connected with the electric light circuit that registers the temperature of the nest each time bird goes on and off the edges. A tiny wire is stretched across the eggs. It looks about like a strand of straw from the nest lining. This wire is connected with a self-recording instrument in the laboratory that registers on a chart the temperature accurate to within one degree Fahrenheit. It is probably the first time that such apparatus has been used to obtain accurate information about the life history of birds.

Two other instruments based on the same principle but not self-recording give more accurate nest and egg temperatures as well as the temperature of the atmosphere near the nest. This enables the bird research workers to note the temperature adjustments in the nest to the warm and cold "spells" outside during the incubation period.

Mr. Baldwin, assisted by two young ornithologists, has been en-

gaged in making an intensive study of house wrens at his laboratory at Gates Mills. Hundreds of pairs of these vociferous songsters nest in the vicinity in specially constructed and numbered bird houses. By banding the young wrens shortly after they are hatched, a daily record is kept of the life of the wren inhabitants of the bird boxes over a range of a hundred acres. From the data he has compiled in this new field of research, Mr. Baldwin expects to write a monograph on the life history of the house wren.

### Birds Build Apartments

Cooperative apartments on the most approved modern plan are built by birds in the tropical forests of Haiti, according to Dr. Alexander Wetmore of the Smithsonian Institution, reporting on his travels in the island republic before the meeting.

The birds in question are known as palm chats. They are small, gentle-mannered, socially-inclined birds that are always found in flocks, and they build their community nests at the tops of tall royal palm trees. Each pair of birds assembles a large ball of sticks, which interlaces at its sides with other balls in the mass. At the top of each ball there is a teaspoon-sized depression, where the single egg is laid.

Another communal nestbuilder was described to the exploring party as the work of a tropical oriole. They found the nests, but discovered that they were the work of a weaver finch from Africa. There was a good deal about the general appearance of the nests, as they hung in the trees, to suggest the work of orioles.

One of the prizes of the expedition was an entirely new species, a thrush-like bird that lives in the dense jungle.

### Spider Catches Sparrow

The meshes of a spider's web may sometimes prove as fatal to a full grown bird as to the lesser fry of the insect world. John B. Semple and Vernon Bailey, the latter a member of the staff of the U. S. Biological Survey, recently found near Sandusky, Ohio, a song sparrow suspended in a spider's web where it had evidently met its death from starvation.

Both the bird and the web were collected intact and taken to Washington where they were put on exhibit at the meeting.

Science News-Letter, December 3, 1927

## CHRISTMAS GIFT

for the Professor or Instructor in the Biological Sciences—  
A subscription to one or more of the Wistar Institute  
publications

Journal of Morphology and Physiology.....	\$12.00 per vol.
The Journal of Comparative Neurology.....	7.50 per vol.
The American Journal of Anatomy.....	7.50 per vol.
The Anatomical Record.....	5.00 per vol.
The Journal of Experimental Zoology.....	7.50 per vol.
American Journal of Physical Anthropology	6.00 per vol.
Bibliographic Service .....	5.00 per yr.

Address

THE WISTAR INSTITUTE OF ANATOMY AND  
BIOLOGY  
PHILADELPHIA