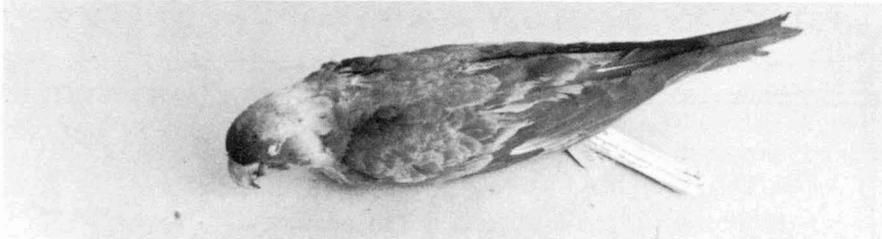
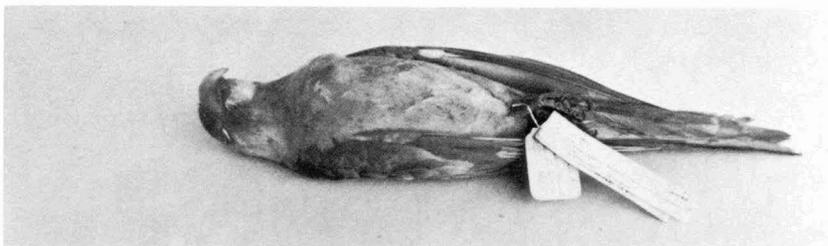
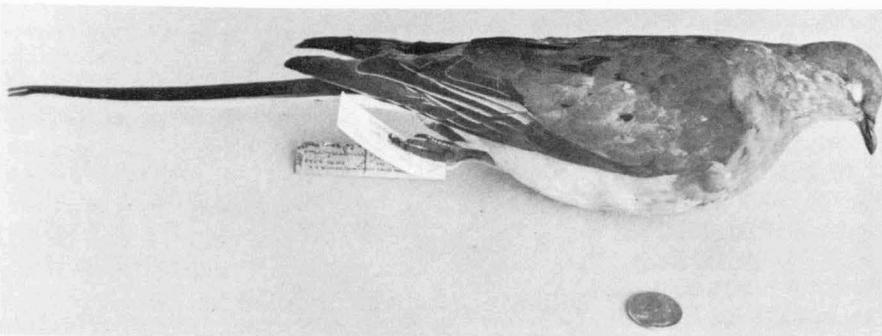
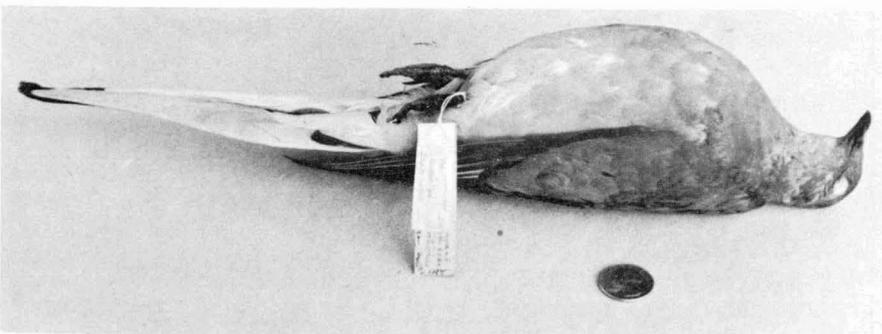


a View into a Museum's Bird Collection

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Two specimens of extinct birds in the museum's collection. Top – Carolina Parakeet, Bottom – Passenger Pigeon, with quarter to show size. These birds were collected in the late 19th century when they were common in the wild.



Behind the closed and locked doors of the Ornithology Section, located on the second floor of the Natural History Museum of Los Angeles County, is housed the tenth largest bird research collection in the United States and Canada (Auk, 1973, vol. 90, p. 136-170). The reason for the locked doors is not that we are trying to hide something from the visiting public, but rather that we are trying to protect what we do have, and that is a collection of nearly 100,000 bird specimens from all over the world. Each year over 1,000,000 people visit the museum, and obviously we cannot have that many people going through the research collections, especially when the full utilization of the collections requires quick and easy retrieval of specimens and/or data from specimens.

Individuals or small groups, however, are welcome to use, by appointment, the materials that we have here at the museum. On almost any day of any week, you can find graduate students, artists, photographers, bird watchers, hunters, law enforcement officers, game wardens, writers, aviculturists, youth groups, scouts, science clubs and college classes using the bird collection or our reference library. One person you can always find here is Geoffrey Roberts-Coe (an excellent bird artist, featured in the AFA Watchbird, vol. 1, no. 1, August 1974), busily painting, using actual specimens from the collection for color and size comparisons.

It may seem strange to the reader to be discussing dead birds in a publication dedicated to aviculture, but perhaps I can show that there are direct benefits for each discipline here. Many aviculturists frequently use our bird collection to learn more about their birds, how



Jim Northern with a Toco Toucan, showing trays of part of the Museum's Toucan section.

to determine sexes or ages of their birds, or simply to find out what a particular species of bird that they are contemplating purchasing really looks like. Or they may want to find out whether they have paired off a male and female of the same species; for example, have they paired a Cordon-bleu female with a Blue-capped Cordon-bleu? Or do they have the correct female for a particular species of Bishop?

Many people when visiting the museum research collection for the first time are dismayed to find that we have more than one specimen of each species of bird. The term "over-kill" is frequently heard, until we point out a few facts to them about birds, such as sexual differences, age differences, seasonal plumage changes, eclipse plumages, and individual variation. Frequently, to explain variation within a species, I like to ask the question, "Could you go out on the street and pick one person that is typical of the human species (*Homo sapiens*)? That is, typical as far as skin color, height, weight, hair color, eye color, shoe size, etc.? Could you pick two people (male and female) to represent *Homo sapiens*? Of course not, but if you had ten or twenty people, you could construct a composite picture of an average person, and with an even larger sample size of one-hundred people, you would be able to construct an even more accurate composite picture. This same variation in physical differences between individuals occurs in all living things, but because man is a large sized organism, these variations are more easily seen. Bird species also have the same type of variations between individuals, but since birds are a much smaller organism, their variations are proportionally smaller.

If museums only had one specimen of

each species of bird, for example, a lutino Peach-faced Lovebird, the curator might assume that all Peach-faced Lovebirds look like his one sample. What would he think then if he found a blue phase or a pied specimen? What about the Eclectus Parrot, where the male and female were originally described as separate species because they were so different?

When I say bird specimen, I mean a bird study skin, which is a bird that has been carefully skinned and the skin filled with cotton and dried. Study skins (see photos) are not positioned in lifelike attitudes with glass eyes, but are prepared so that they are easy to handle, study, and house. No study skin is complete without a specimen label tied to it which must contain the following information: (1) Exact geographical location where the specimen was collected, (2) Date specimen died or was killed, (3) Sex of the specimen (determined by autopsy), and (4) the Collector's name. Additional information is usually included such as reproductive condition (with specimens collected over a period of time, breeding seasons can be determined). Stomach contents are also recorded (this may give aviculturists clues as to the types of food a particular species prefers. This food preference sometimes varies during different parts of the bird's life cycle, such as with Violet-eared Waxbills. A recent study has shown that adult Violet-ears collected during the nesting season were feeding primarily on termites, and that young in the nest were fed termites exclusively. The same thing was shown for Blue Waxbills. Black-cheeked Waxbills, however, fed on small beetles. During the non-breeding season, however, stomach contents of collected specimens indicated that these three species fed mostly on

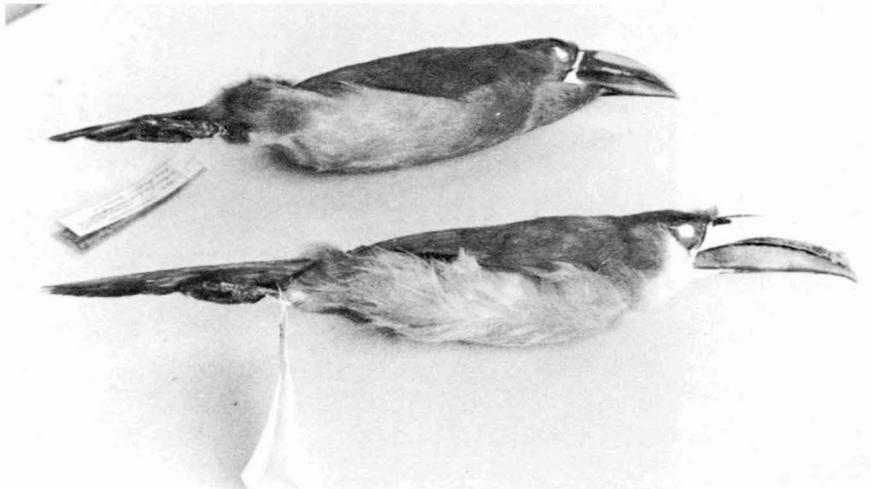
grass and other small seeds. This could be an important clue in trying to get these species to breed in captivity.

Another benefit to be reaped from a museum bird collection by aviculturists are ways of determining the sexes of various birds, especially when both sexes are similar in appearance, as in the case of Lavender Waxbills. In some species, sexes can be more accurately guessed by measuring wings; in others, bill length may be the key. These methods can be determined from museum study skins where the sexes have been determined by autopsy, and measurements of many specimens taken to find differences between males and females of the same species. Nothing is more frustrating than trying to pick out a "pair" from a cage of two or three-hundred birds of a species that has little or no sexual dimorphism.

A museum research collection is an international resource, a permanent, documented record of the world's wildlife for future generations. Where else but to a museum can children go to see a Great Auk, a Passenger Pigeon, or a Carolina Parakeet (to name just a few extinct birds)? The specimens of these birds that we have in our collection were collected in the late nineteenth century, when all of the above-mentioned species were common in the wild. The oldest specimen that the museum has is our mounted specimen of Great Auk, collected and mounted sometime prior to 1844, when the last known Great Auk died.

An active museum collection continuously grows, and it grows in a variety of ways. The museum sends expeditions into various parts of the world to collect and bring back samples of wildlife. (The bird section currently has an expedition working in the Central African Republic.)

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Two subspecies of Emerald Toucanets.

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We sometimes purchase collections of specimens from collectors in other areas of the world. We also exchange specimens with other museums. At the present time, for example, this museum is involved in exchanging specimens with the National Museum of Natural History (Smithsonian Institution, Washington, D.C.), The Museum of Zoology (University of Michigan), and the National Museum of Rhodesia. Museums realize that it is more economical to exchange specimens than it is to put a collecting expedition into the field to collect those same specimens. Many of the specimens in our collection have been donated by aviculturists, zoological parks, and law-enforcement agencies.

As mentioned earlier, the bird collection at this museum now contains nearly 100,000 specimens. This may seem like an enormous number of "dead birds", but this is a rather small collection in comparison to other museums in the United States. The American Museum of Natural History (New York) now has over 900,000 specimens. The most recent survey (1969) of bird collections in the United States and Canada showed that there are nearly 4,000,000 bird specimens contained in 283 different collections. This number pales to insignificance when you consider that duck hunters may take more than 4,000,000 Mallard Ducks (a single species) each year in the United States alone, or that in the first seven months of 1972 (prior to the import ban in August, 1972 due to the outbreak of exotic Newcastle disease), 296,400 Strawberry Finches and 333,000 Red-eared Waxbills were imported into the United States. A total of 966,500 live birds were imported into the United States in 1971, followed by 641,000 in 1972. A few

years ago, a shipment of 1,400 Cordonbleus arrived at Los Angeles International Airport (in two crates). Nine hundred of these were dead on arrival at LAX.

Recently a California State Department of Fish and Game warden brought in some "Mexican Yellow Weavers" that were offered for sale in a local pet shop and had been seized as evidence. The warden thought that the birds looked like goldfinches, and we positively identified them as American Goldfinches, a protected, migratory, native bird here in the United States.

The museum is in a rather unique position, in that we are constantly getting telephone calls from people trying to identify some mysterious bird in their backyard. I can remember, not too many years ago, identifying a Trumpeter over the telephone (it was walking down Adams Boulevard) and surprising the woman by telling her who owned the bird. She called the owner (Captain Jean Delacour), and he went out and recaptured his escaped bird. In the past year we have referred many calls like this one to members of the AFA Retrieval Team.

Much of our time is spent on the telephone answering questions from the public, offering information, or referring them to someone knowledgeable in the subject in which they are seeking information. Fortunately, we have good friends in the AFA who are well-versed in hand-feeding assorted types of baby birds, which is what many of our telephone calls are about this time of year. Or, we are asked such questions as, "Linnets have built a nest in a flower pot on our window ledge. How soon will the eggs hatch and how soon will the babies leave the nest? If we touch the babies will the mother bird desert them?"

Many of our specimens have been used by various illustrators and authors as models for illustrations in their books including the Yellow-headed Amazon in Forshaw's "Parrots of the World" (pg. 542) and the Barred Quail chick in Johnsgard's "Grouse and Quail of North America" (plate opposite pg. 365). This museum is apparently the only one that has preserved chick specimens of Barred Quail, and these were dead chicks donated by Mr. Frank Strange, a local game bird breeder.

We also have an extensive ornithological library here at the museum, with publications never heard of by many readers. Since this is a research and reference library, we cannot allow books to be borrowed, but any interested person is welcome to use the books here at the museum.



View of storage area for part of bird collection.