eliminate, the husbandry of captive wildlife. Nothing could present these anti-avicultural organizations a stronger argument to use against us than the irresponsibility of hybridization. There is also an increasing level of concern within the scientific community, and certainly it would not be within our best interests to alienate them. It is my opinion that this is a problem we cannot afford to ignore. To do so is to invite disaster for, almost certainly, if we do not take the initiative in an effort to resolve this problem it will be done for us by the enactment of restrictive or crippling legislation.

There is much that can be said on the issue, and I only scratch the surface here. I would, however, like to make a proposal. I would like to be included on the speaking roster of the impending AFA convention which convenes during August in Phoenix. The purpose, of course, would be to bring an increasing awareness of the evils of hybridization, to create a better understanding of why it is wrong, and what must be done to make corrections. Equally important, perhaps, would be an outlining of possible consequences if we in aviculture continue to ignore the problem. I am aware there are those aviculturists who will not look upon my convictions with favor. However, in the best interest of aviculture as a whole, and certainly in the best interest of the resource, hybridization is a practice that must be controlled. Failure to do so will be far more costly than we would like.

I shall look forward to seeing you again in Phoenix. In the meantime, take care and warm wishes.
Sincerely yours,
Bob Elgas
President Emeritus
International Wild Walterfowl Assn.

Dear Bob,

AFA shares your concern for the hazards of hybridization and has taken an active stand against that practice, as we have often editorially stated in these pages. We continue to oppose this practice; however, it must be remembered that we have only limited ability to deal with this concern, i.e. via persuasion.

I will direct your interest in speaking before the AFA at its August convention to Nancy Vigran, Speaker Committee Chairman, (818) 980-4694.
Sincerely, Ed. (J. Jennings) ●

Feathers and Bones

by Bobbi Hobbs
Crest, California

Death is an issue that all aviculturists encounter, particularly during breeding season. We agonize over chicks who die in the egg or shortly after hatching, and death among adolescent or adult birds. At times, a necropsy is performed to determine the exact cause of death, other times not.

For the Natural History Museum, their work begins with death. Recently I had the privilege of meeting with Steve Gustafson, curatorial assistant of San Diego's Natural History Museum, Department of Birds and Mammals. According to Steve, natural history museums are always interested in obtaining donations of all types of birds. For the ornithologist, vast amounts of knowledge may be gained through the examination of a bird's corpse. It is through the donation of birds that they can learn and document characteristics of a species, what role they played in survival and how these species currently relate to other species.

External examination provides information on plumage, color patterns, body measurements, molting patterns, and other specific details unique to that species. However, the crux of the study is that which cannot be seen in life; the skeletal makeup of the species. To the scientist, the skeleton provides some of the most valuable information. Each bone is measured and examined to extract the most minute details possible. With this knowledge, a scientist can identify and classify a species and, if needed, reconstruct the species. In addition, the scientist can now determine the similarities or differences between various species of birds.

Since ancient times, birds have played an important role in various civilizations. Their bright plumage and entertaining qualities made them a valuable asset of trade. Numerous anthropological sites have uncovered the skeletal remains of birds which were not native to that particular region, thus suggesting trade with the birds' country of origin. Scientists may also formulate a pattern of migration through skeletal remains.

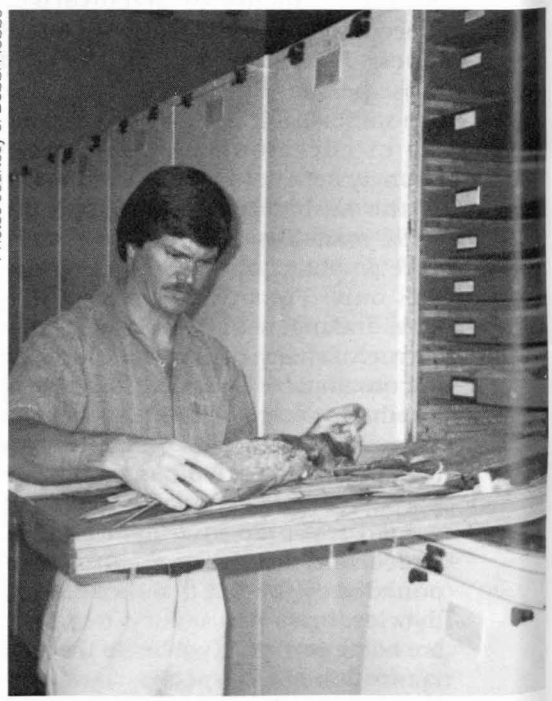
If one of your birds dies, your first consideration must be what you want to accomplish from the death. If you wish to determine the cause of death through a necropsy, then the bird must be tightly wrapped in a plastic bag and placed in the refrigerator. However, if you decide against a necropsy and choose instead to donate the body, then a different procedure needs to be followed.

Birds which are to be donated must be tightly wrapped in a plastic bag (''Zip Lock'' if the bird is small enough), and secured with masking tape. On the tape you want to provide the following information:

1. Biological and common name
2. Date of birth, if known
3. Date of death
4. Domestic bred, or
5. Imported — from which country
6. Any identification number (i.e. band number)
7. Your name

Since tissue damage occurs rapidly, immediately place the bird in the freezer. Place a call to the museum to be sure they are interested in the species you have to offer and to make

Photos courtesy of Bobbi Hobbs



Steve Gustafson, curatorial assistant of San Diego's Natural History Museum, takes inventory of a drawer containing full skins of a variety of macaws.

arrangements for delivery. If you must ship the bird, check with the post office, and shipping/delivery companies in your area to see which will allow the use of dry ice and provide the quickest delivery service. Birds which are shipped should be packed with dry ice in a styrofoam cooler. Again, tightly seal the cooler.

Once a bird has been received by a natural history museum, it is logged in a master receiving book and is assigned an identification number. In addition, the bird will also be logged into books of taxonomic order which reflects the order, family, genus, species, and sub-species of the bird. Now the hard decision comes for the museum staff. In what form can this particular bird best be used? There are two basic forms for the staff to choose: 1) skins; and 2) skeleton.

There are three types of skins: 1) flat; 2) full; and 3) shmoo (pronounced su moo). A flat skin is one in which the whole skeleton is removed while the feathered skin is kept in a flat skin form and will be used to study plumage and molting patterns. When a bird's body is left completely intact, it is referred to as a full skin. This can be used to study the overall appearance and size of the bird. The last type of skin is referred to as a shmoo. In this case, parts of the skeleton are removed, the bird is stuffed where needed, and then sewn back together to give the appearance of a full skin.

The skeleton, which generally comes from a flat skin, is not kept whole. Instead, the skeleton is broken down into its individual bones and labeled with its identification number. It's amazing to see a neat row of handwritten numbers even on the smallest bones. As mentioned previously, the skeleton provides the most information.

For aviculturists, death is a frustrating and saddening moment. However, birds donated to a natural history museum live on by providing us the opportunity to continue learning about the species. So look up the museum nearest you and contribute to aviculture via a new avenue.

Author's Note: Amadeo Rea, Ph.D., curator of birds, San Diego Natural History Museum, is currently researching New World macaws. If you are able to donate to this study, contact Dr. Rea at the San Diego Natural History Museum, 1788 El Prado, San Diego, CA 92101, telephone (619) 232-3821. ●