

Aviculture: Zoological and Private Let's Get Together

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Everyone knows the troubles that the natural world faces, habitat loss being one of the most serious. Understanding what we have lost, the reasons why and what we can do to preserve what remains is the goal of both serious private aviculturists and zoological institutions around the globe. Unfortunately, at this time there is not enough interaction and sharing of information and expertise between private aviculturists and zoological institutions. Pooling our knowledge and resources may lessen the distance to our goals. At a recent American Zoo and Aquarium Association (AZA) Regional Conference in Oklahoma City, the Avian Interest Group (AIG) met to discuss many topics concerning aviculture and zoos. A committee was formed that charged itself with the task of improving the relationship between zoos and the serious aviculturists. The AIG Liaison Committee (is this a reasonable title or should we find another?) is composed of the Committee Chair, Forrest Penny (Jacksonville Zoological Gardens, Florida), Laurella Desborough (American Federation of Aviculture), Natasha Schischailin (Houston Zoo, Texas), Susan Healy (Sacramento Zoo, California), Mark S. Myers (Audubon Zoo, Louisiana), Ted Fox (Burnet Park Zoo, New York) and Steven Sarro (Baltimore Zoo, Maryland). Our committee decided that our first project in trying to help bridge the gap between these groups would be to provide some background on the programs with which the AZA is presently involved.

The AZA, along with zoos and aquariums, has focused much of

its attention on habitat conservation and the enhancement of genetic diversity through careful husbandry. This article will speak to the latter, as this is the area that has the most interest and impact for the private aviculturist.

To begin with, the International Species Information System (ISIS) is a program created to assist zoos by providing an up-to-date inventory of all mammals, birds, reptiles and amphibians in all institutions that are part of the ISIS network. If Zoo A needs a female Wattled Crane, the ISIS Inventory will provide a listing of all institutions that have Wattled Cranes. With this listing, Zoo A can determine where potential female Wattled Cranes are located.

But this is just a starting place for Zoo A. Many species are participants in a Studbook. Studbooks and their keepers utilize a program called the Single Population Analysis and Records Keeping System (SPARKS) which keeps the recorded historic data of all individuals of a given species. Programs included in SPARKS perform genetic analyses and determine the demographics (i.e., size, growth, density and distribution) of a species population. A Studbook can be of regional scope (i.e., North America) or of international scope (i.e., global), with the progression of regional studbooks to the international level if the need arises. In the Studbook, every individual, its progeny and its ancestors are recorded so that the relatedness of any individual to the entire captive population can be evaluated. This is vitally important as Zoo A, in this example, would like to pair its male

Wattled Crane with the most desirable genetic match. The Studbook is a valuable tool that collection managers can utilize to help bring potential mates together. Studbooks are not necessarily limited to zoo personnel. There are studbooks and studbook keepers in private aviculture. There is plenty to accomplish and all help is welcome.

Zoo A can go a step further and contact the Species Survival Plan (SSP) coordinator. The SSP manages the species as one flock and zoos and private aviculturists may participate voluntarily in the SSP. For the aviculturist, being part of an SSP program team helps to bridge gaps as well as helping the species' survival. Not all Studbook species have an SSP. The SSP coordinator is an expert on the species. The SSP coordinator makes breeding recommendations, which are approved by a propagation group, based on information gleaned from the Studbook as well as utilizing the expertise and general recommendations of the Taxon Advisory Group (TAG).

A TAG is a group of animal management professionals that have a vested interest in the propagation of a certain group of animals. All Studbook keepers and SSP coordinators are TAG members. There are many TAGS some of which are the Gruiformes TAG (Cranes, Bustards), the Raptor TAG (Birds of Prey), Anseriformes TAG (Waterfowl) and Columbiformes TAG (Pigeons, Doves), to name a few. There are also mammal, reptile, amphibian, fish and invertebrate TAGS. TAGs discuss many issues that impact the conservation of target species such as available zoo space, inbreeding and kinship considerations, and management and husbandry guidelines. In short, TAGs are "think tanks" where decisions are made and guidelines created that will impact the captive management of many species in the future.

To pair the Wattled Crane with the best genetic mate, Zoo A would accept the advice of the SSP coordinator. This could include moving Zoo A's Wattled Crane to a different zoo or accepting a potential mate into Zoo A's

collection. Advanced artificial insemination techniques may make animal transportation less likely in the future. Breeding recommendations take into consideration the number of offspring needed from any given animal. For some species, one offspring from a pair may be all that is necessary to maintain the genetic diversity of the captive population. Unlimited breeding of animals, especially genetically over-represented animals, is no longer a desired goal. A genetically diverse captive population is the goal. Simply, we must manage the species as one flock and not as individuals.

Below is a list of bird species that have a Studbook or an SSP.

Studbooks:

Fairy Bluebird-Victoria Roth (Toledo Zoo, OH) (419) 385-5721; FAX 385-6935

Palm Cockatoo-Mike Taylor (White Oak Plantation, FL)
SSP-Mike Taylor (White Oak Plantation, FL)

Andean Condor-Susan Kasielke (Los Angeles Zoo, CA)
SSP-Mike Wallace (Los Angeles Zoo, CA)

California Condor-Cyndi Kuehler (San Diego Zoo, CA)
SSP-Mike Wallace (Los Angeles Zoo, CA)

Hooded Crane-Bruce Bohmke (Phoenix Zoo, AZ)
SSP-Bruce Bohmke (Phoenix Zoo, AZ)

Red-crowned Crane-Scott Swengel (International Crane Foundation, WI)
SSP-Claire Mirande (ICF, WI)

Wattled Crane-Fred Beall (Franklin Park Zoo, MA)
SSP-Fred Beall (Franklin Park Zoo, MA)

West African Crowned Crane-Susan Haeffner (Denver Zoo, CO)

White-naped Crane-Christine Sheppard (New York Zoological Society, NY)
SSP-Christine Sheppard (NYZS, NY)

Black-naped Fruit Dove-Ron Morris (North Carolina Zoo, NC) (910) 879-7000; FAX 879-2891

White-winged Wood Duck-Sherry Branch (Sea World, FL) (407) 351-3600; FAX 345-5397

Caribbean Greater Flamingos-Peter Shannon (Hawaii)

Tawny Frogmouth-Jim Fish (Oklahoma City Zoo, OK) (405) 424-3344; FAX 424-3349

African Pygmy Goose-Douglas Piekarz (New York Zoological Park, NY) (718) 220-5100 FAX 733-7300

NeNe Goose-Kenneth Reininger (North Carolina Zoo, NC) (315) 435-8511; FAX 422-1224

Abyssinian Ground Hornbill-Celia Falzone (Dallas Zoo, TX)

Great, Rhinoceros, Rufous Hornbill (San Antonio Zoo, TX)

Scarlet Ibis-Anna Marie Lyles (Central Park Zoo, NY)

Waldrapp Ibis-Mark Hofling (New York Zoological Society, NY)

Micronesian Kingfisher-Beth Bahner (Philadelphia Zoo, PA)
SSP-Beth Bahner (Philadelphia Zoo, PA)

Laughing Kookaburra-Mark Myers (Audubon Zoo, LA) (504) 861-2537; FAX 866-0819

Hyacinthine Macaw-Fred Beall (Franklin Park Zoo, MA) (614) 442-2002; FAX 442-2815

Red-fronted Macaw-Wendy Turner (Sea World, CA) (619) 222-6363; FAX 226-3951

Spectacled Owl-Steven Sarro (Baltimore Zoo, MD) (410) 396-7638; FAX 396-6464

Hawk-headed Parrot-Don Rhoades (Riverbanks Zoo, SC) (803) 779-8717; FAX 256-6463

St. Vincent Parrot-Don Bruning (New York Zoological Society, NY) (718) 220-5159; FAX 733-7300
SSP-Don Bruning (NYZS, NY)

Thick-billed Parrot-Susan Healy (Sacramento Zoo, CA) (916) 264-5166; FAX 264-5887
SSP-Susan Healy (Sacramento Zoo, CA)

Golden Conure-OPEN

Black-footed Penguin-Steven Sarro (Baltimore Zoo, MD)

Humboldt Penguin-Gail Perkins (Brookfield Zoo, IL)
SSP-Patricia McGill (Brookfield Zoo, IL)

Malayan Peacock Pheasant-Don Bruning (New York Zoological Society, NY) (718) 220-5159

Rothchild's Mt. Peacock-Don Bruning (New York Zoological Society, NY) (718) 220-5159

Crowned Pigeons-Dave Wetzel (Kansas City Zoo) (816) 333-7406; FAX 822-8903

Pink Pigeon-Kurt Hundgen (New York Zoological Society, NY)
SSP-Kurt Hundgen (NYZS, NY)

Violet Plantain-eater-Rochelle Plasse (Houston Zoo, TX) (713) 525-3300; FAX 525-3330

Lady Ross's Plantain-eater-Rochelle Plasse (Houston Zoo, TX) (713) 525-3300; FAX 525-3330

Guam Rail-Scott Derrickson (NZP Conservation Center, VA)
SSP-Scott Derrickson (NZPCC, VA)

Darwin's Rhea-Scott Derrickson (NZP Conservation Center, VA) (703) 635-6500; FAX 635-6551

Lilac-breasted Roller-Roger Clawitter (Burnet Park Zoo, NY) (315) 435-8511; FAX 422-1224

Screamers-Mike Macek (St. Louis Zoo, MO)

White Stork-Ken Kawata (Belle Island Zoo, MI)

Abdim's Stork-Jeff Fouse (San Antonio Zoo, TX)

Sun Bittern-Charles Picket (National Zoo, DC)

Boat-billed Heron-Forrest Penny (Jacksonville Zoo, FL)

Inca Tern-Fawn Dunnemann (San Antonio Zoo, TX)

Toco Toucan-Mary Healy (Discovery Island, FL) (407) 824-3784; FAX 824-3467

Cinereous Vulture-Ed Diebold (Milwaukee Zoo, WI)

King Vulture-OPEN

Moluccan Cockatoo-Sue DuBois (Mickey Grove Zoo) (209) 953-8840; FAX 331-7271

Magnificent Ground Pigeon (Pheasant Pigeon)-Joseph Barkowski (Houston Zoo, TX) (713) 520-3200; FAX 525-3330

Cuban Amazon-E. Trent Swigert (ABRC) (407) 793-5135; FAX 790-1317

Bali Mynah-Jimmy Pichner (Minnesota Zoological Garden) (612) 431-9200; FAX 431-9300

Our Liaison Committee is trying to bridge the gap between the private avicultural sector and zoological institutions. This union can be achieved and is what we should work toward. While a few zoos have restrictions concerning dealings with non-zoo collections, most zoos acknowledge the contribution that private aviculturists can provide and are willing to share resources. It is important for the private aviculturist to understand that when they join an AZA program, they are accepting the decisions of the coordinator and/or TAG just as participating zoological institutions do. This is a commitment that must not be taken lightly or dismissed if a decision is made that is not popular with the aviculturist (such as a recommendation not to breed a particular animal). Captive populations should be viewed as a whole and genetic diversity is the goal. Production of unlimited offspring by every possible breedable bird is no longer an acceptable goal. Contact your local zoo or me if you would like further information or are interested in becoming part of a Studbook or SSP team.

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