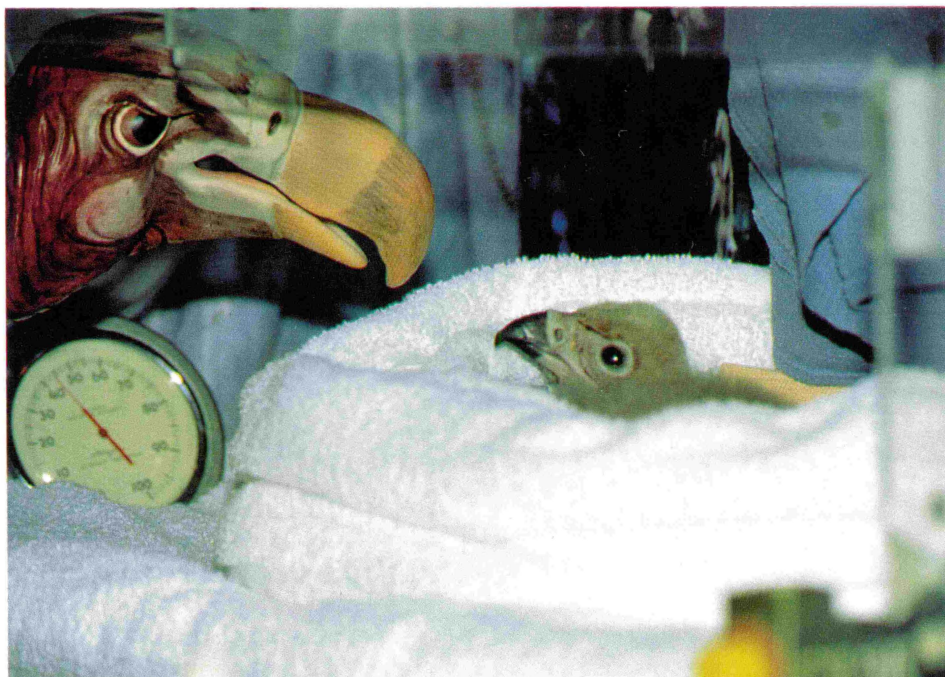


Cinereous Vulture chick with rubber puppet head in incubator. The chick was reared using the puppet purchased from a nature store and colored with permanent markers to match the coloration of the parent bird. The puppet was easily cleaned and sterilized.



Photos courtesy of Greg Bockheim

Psittacine Puppets

Using artificial parents to overcome the problem of imprinting.

by Greg Bockheim
Disney World Animal Collection — Birds

Part I

We have all seen or experienced the pet parrot that becomes so attached to its owner, due to hand rearing, that it develops into a mentally and physically unhealthy bird. Easily confused and

distracted when major changes are made in their environment or from lack of attention, these imprinted birds often elicit antisocial and problematic behaviors, or worse, turn to self mutilation.

Some human imprinted birds make terrific pets and companions and, if given the attention they crave, become a cherished part of the family, however, many hand reared and imprinted birds return to the breeder market for countless reasons: when pet owners become bored with them, because maturing birds can be too difficult for the family to handle, or there is just nowhere else in the pet market for them to go. Whatever the reason, the

breeding potential of an imprinted bird is very difficult to predict.

Young psittacines are sometimes removed from the nest for hand rearing because the parent birds destroy their own eggs and babies, or because they mutilate the chicks during their development. Many of the larger psittacines, such as the Moluccan Cockatoo and many species of macaws and Amazon parrots, possess such low reproductive rates (with regards to supplying the pet market) that the eggs or chicks are often pulled to stimulate the parents to lay more frequently.

As aviculturists we know that the days of mass and indiscriminate importation are over. The supply of mature and reproductively capable non-imprinted psittacines is limited to those captive wild-caught birds that still remain unpaired and to birds that are parent reared through weaning.

Aviculturists are producing regrettably small numbers of birds which are familiar with their own species social and reproductive identities because too many are hand reared and imprinted. Pairing a mature imprinted bird with a wild caught bird has resulted in variable breeding success. With the Cape Parrot, Moluccan Cockatoo, and many others, imprinted birds are proving to be unsuitable breeders because they have never learned the social

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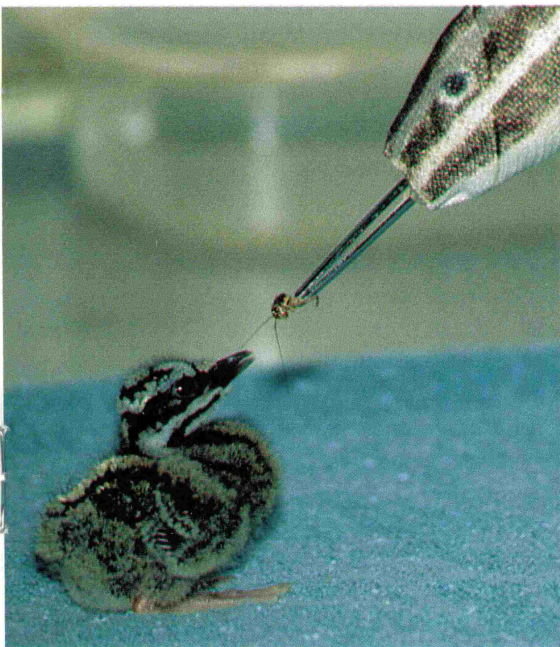
skills of their individual species.

As aviculturists we need to produce parent reared birds who identify with their own species and will raise their offspring. If we are unable to allow the parents to rear their own chicks, we must look to alternatives to traditional hand rearing techniques.

Tremendous efforts have been put forth within zoological and animal research institutions using surrogate parental models (including the use of puppets). Puppets have been used to rear a variety of birds, most commonly raptors and cranes. Puppets are routinely used to rear California Condors, reducing human imprinting levels and thereby helping to save the species from extinction.

Cranes have been reared from hatching to maturity with the use of puppets alone, the puppet-reared birds then being reintroduced to the wild populations. I have used puppets to raise Spectacled Owls, Sunbitterns, Piping Guans, and a Cinereous Vulture.

Puppets can also be used to "kick start" a chick's familiarity with the parent birds by puppet rearing them for the first few days and then switching the chicks with dummy eggs left under




This Sun Bittern chick's surrogate parent model is made from a 12-inch tweezers wrapped with an Ace bandage to form its head and neck. The bandage is colored using markers. The tweezers are functional allowing the puppet to pick food items from a dish and feed them to the chick.

the parents. The application of puppet rearing is exciting and a potential answer to rearing less imprinted psittacines for the future of avian species and for the future avicultural.

Of course the questions abound: What techniques should be used? What brooder set up is both functional and most closely mimics that of the wild birds? How realistic do puppet styles need to be? Where do vocalizations fit in? At what age does acute imprinting cease? When should socialization take

place with their own species and, what about weaning? Are puppet-reared birds more likely to reproduce and rear their own offspring?

These are questions that can be answered if we take on the challenges of rearing a less human-imprinted psittacine. Over the next several months I will review the theory and possible techniques that may be necessary for puppet rearing psittacines and eventually apply them to an actual case. 



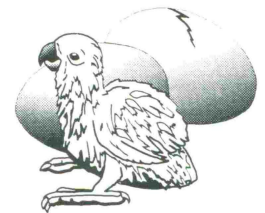
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