Proposed American Standards for Mutations

by Fred and Lyrae Perry, Norco, CA

The idea for an American Standard for Mutations came about because aviculturists who are interested in raising Psittacula mutations want and need to communicate more effectively with each other. The many problems with identification and naming of mutations can be reduced and someday eliminated by the adoption of a standard for notation and nomenclature.

Interest in Indian Ring-necked Parakeet mutations is at an all time high. Enthusiasm with the purchase of a beautiful mutation often gives way to frustration when it comes to locating a suitable mate.

The problem isn't a lack of birds, but rather a lack of consistency in nomenclature and understanding of inheritance modes. Different breeders are using various names for the same mutations. Understandably, those new

to the mutation field are "put off" by the confusion and contradiction in terms. Many do not understand the inheritance modes and promises are made to buyers that cannot be fulfilled. Some people feel they have been cheated, although in most cases this was unintentional due to lack of knowledge on the part of both buyer and seller. So who would you believe? We desperately need the American Standard for Mutations so anybody and everybody has a standardized reference.

An American Standard will help the many new mutation enthusiasts and long-time breeders by providing a concise reference guide. The American Standard is a "work in progress." As long as there are new mutations popping up, the American Standard will continue to grow. The information in

the Proposed American Standard is intended as a framework for discussion and hopefully adoption by all interested parties. The Standard can also be adopted/adapted for use by breeders of other bird species that have mutations.

While the American Standard for Mutations will provide us all with a common language and written identification of mutation types, it can't offer any guarantees. The phrase "caveat emptor" still applies. Individual aviculturists will have to educate themselves on what the various mutations should look like and make their purchase decisions accordingly.

All questions, comments, and suggestions should be directed to *Psittacula Sightings* in care of the AFA Watchbird magazine.

Does the World's Rarest Macaw Hybridize?

by David Waugh, Ph.D. Scientific Director, Loro Parque

ecent news from Brazilian wildlife agency IBAMA suggests the Spix's Macaw Cyanopsitta spixii, the world's most threatened parrot species, hybridized in the wild state. Given that there is only one known individual left in the wild, a male, which under the circumstances has opted to form a pair with a female Illiger's Macaw Ara maracana, at least the potential for this to happen is not surprising. There are no written records of confirmed hybrids between the Spix's Macaw and other species, either in captivity or the wild, but now there comes confirmation that an egg taken from the nest of this mixed pair contained an embryo.

The egg was one of a clutch of three that were removed from the nest of the mixed pair in December 1996 by biologists of the Spix's Macaw Recovery Project, financed by the Loro Parque Fundación. The Committee for the Recovery of the Spix's Macaw

(CPRAA) had authorized an experimental transfer of wild Illiger's Macaws eggs to the nest of the mixed pair with the purpose to determine the incubating and rearing capabilities of the pair as a preliminary to the possible transfer of Spix's Macaw eggs from the 40-strong captive population. Although intensively observed, the mixed pair had never been known to hatch their own eggs, the principal supposition being that these were infertile, although it had not been possible to remove eggs from the nesting cavity until the experimental transfer last year.

Microscopical analysis of the eggs at University of Sao Paolo showed no embryonic development in two of them, but the third had a well-formed embryo approximately 24mm long, with the head forming a third of the total length. In this embryo the beak was present, the wings well-developed and traces of the dorsal feather tracts visible. Its stage of development was equivalent to stages 32 to 34 of chicken embryo development which means seven or eight days of incubation and a total approximate age of 10 or 11 days. The embryo DNA was too degraded for direct study, but can still be studied through amplification techniques for comparison with Illiger's Macaw DNA when samples are collected from the same region.

Until the DNA study is done we still do not know if the embryo is truly a hybrid or the result of a "sneaky mating" between the female Illiger's Macaw and a male of her own species. However, the field biologists confirm that the mixed pair is strongly bonded and the male Spix's Macaw guards his female well. Although of general interest, the potential occurrence of hybrids presents no immediate conservation advantage for the Spix's Macaw. The efforts to restore this species to the wild state will continue.