Experiences in breeding the

by Ron and Joanne Schoenwald Iowa City, Iowa

Our first introduction to the Golden Conure, also known as the Oueen of Bavaria, was through Bill Wilson, previous owner and operator of Norshore Pets (Marengo, IL). We would visit him twice a year to purchase our breeding supplies and to admire his Golden Conure hatchlings. Bill, a regional vice-president of the American Federation of Aviculture (AFA), raised many varieties of parrots but was especially proud of his Golden Conure breeding pair which he purchased as a young s/s pair in 1984. Their first eggs in 1983 (at age three) were infertile, but since then these particular birds have been an extremely prolific breeding pair. Their clutches have contained two to four eggs twice a year with the exception of one year. To our knowledge, only on occasion would the last egg to be laid not hatch, otherwise, all hatchlings were healthy. They have always laid their eggs between October and March of each year through 1987.

In May of 1988 we purchased a 12 week old female from Bill Wilson and in one year introduced her to a one year old male which we acquired from the San Antonio Zoological and Botanical Gardens. At age 1 year and 9 months (October 1990) she laid her first eggs; however, all three were infertile. We decided to let her sit on the eggs and develop her nurturing instincts. Her mate was also less than two years old, therefore, the likelihood of her laying a fertile clutch by removing the eggs immediately was not much of a possibility. We let her sit on the eggs for 30 days before we removed them. She immediately joined her mate to play with the wooden toy and bell in their flight, and at the risk of anthropomorphic simplicity, we observed her to be relieved and happy at shedding the responsibility of parenthood at

such a young age. Apparently, early breeding runs in the family; of course, geneticists have known for vears that reproducibility (and longevity) are inherent in gene transfer.

In October of 1989 we received a distressing telephone call from Bill Wilson that because of his terminal illness he could no longer care for his breeding birds. He asked if we would purchase his Golden Conure breeding pair from him and continue their care. We agreed but considered them "a loan" until he could recover (which as many readers know, he did

The birds were transported by van about 230 miles. We decided that the best chance of not stressing the pair was to allow them to remain in their California breeding cage and to continue using the same wooden nest box (12" x 12" x 24"). They remained in their nest box for the entire trip. Within about 5 hours, we were able to relocate their cage in a well-lighted, temperature controlled daylight basement. Their cage was placed next to their daughter and her mate's flight cage which measured 3' x 8' x 6'.

As most breeders know, whenever birds are relocated, no guarantee can be given regarding future breeding success. In fact, as the sale was completed and we were loading the birds onto the van, Bill Wilson told us that there was only one year in which they didn't breed. That was the year he moved the cage and nest box to another room in his house. After hearing this, the next few months were spent anxiously peeking into the nest box anticipating their next scheduled clutch of eggs.

When their next clutch hatched on schedule, we contacted Bill Wilson to tell him the good news. His first words were: "Aren't they ugly?" However, true to the children's fairy tale about ugly ducklings becoming beautiful swans, Golden Conure hatchlings likewise develop a striking appearance when fully feathered.

In 1991 the breeding pair that we acquired from Bill Wilson laid only one clutch for the season. But what a surprise! They laid five eggs and, to our delight, all five eggs hatched. Golden Conures rarely lay five eggs and with a clutch size this large, it would be expected that one or two

Fig. 1 **Growth Curve for Golden Conures** 400 Hatched Between 4/7/91 and 4/19/91 300 Weight in Grams 200 GC#1(4/7/91) GC#2(4/10/91) GC#3(4/12/91) 100 GC#4(4/15/91) GC#5(4/19/91) 20 40 60 80 100 120 140 Days After Hatch



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eggs would not yield hatchlings.

Counting five hatchlings in a nest box is not an easy task and it took a few days after the last egg hatched before we could confirm the headcount. The two youngest hatchlings cried during the night leading us to believe that five hatchlings was beyond the rearing capabilities of the parents. We therefore decided to remove all five for hand-feeding; their ages at this time varied from 9 to 28 days old.

Figure 1 is a chart of their growth rate from this early period to the time when they weaned and their weights stabilized. The graph shows that the two youngest were indeed small in size, but eventually with handfeeding, they reached the same size as the other birds. At ages 3-1/2 to 4 months they were surgically sexed; GC# in figure 1 is a male and the remaining birds are females. It is interesting to note that the male peaked in weight at 40 to 43 days old, whereas, the females peaked about a week later. Also, this male is about 10% lighter in final weight compared to the females. We have noticed this trend with our other breeding Golden Conures. We have also noticed that the females are more aggressive in feeding and less shy in seeking human contact. Clearly, we have not raised enough Golden Conures at this time to extrapolate to the species in general. We observed that two of the female birds (GC#1 and GC#3) have darker eye rings, a slightly dark mottling feature on their toes and a greater tinge of green on the tips of their yellow feathers. However, this appears to be a genetic trait that is not related to either growth rate or sex.

The youngsters were hand-fed with Lake's Hand-Rearing Formula until they weaned, at which time they were gradually introduced to various fruits (1/3), vegetables (1/3) and seeds (1/3). The seeds consist of a parrot mixture that is supplemented with 15% sprouted sunflower. At the present time we have a total of four breeding pairs of Golden Conures, all of which receive the above food mixture.

Our breeding pair of Golden Conures that was acquired from Bill Wilson is the most finicky. They prefer safflower and sprouted sunflower, but eat fruits sparingly and never eat any vegetables or pellets. Red grapes are a favorite, but then we've never met a Golden Conure that didn't love

grapes. We have tried various approaches to entice them to expand their diet, but have never been very successful with them. We add soluble vitamins to their drinking water every other day, but include vitamin E only just prior to the breeding season. We have also prepared a mixture of Lake's Maintenance Diet (1/3), Zupreem monkey biscuits (2/3) and enough water to make a manageable mash. The mash is then mixed with the seed mixture and although the birds try to avoid it, enough adheres to the seeds so that some nutrients are ingested. The Golden Conure requires a permit from the U.S. Fish and Wildlife Service in order to transfer ownership of the birds across state borders. The permit is a requirement of the Endangered Species Act, passed by Congress in 1974. This law became a necessity because of their dwindling numbers in their native habitat, northeastern Brazil, where significant parts of the forest have been cleared for new settlements and highways.

Aside from their alluring beauty, Golden Conures are very social creatures. In particular, hand-fed birds have a strong desire for human companionship. For captive breeding, hand-fed birds are less likely to undergo stress, which is advantageous in identifying and treating a sick bird. Also, hand-fed Golden Conures can be introduced to a varied and healthy diet early in their lives and easily maintained on it in later years. However, by removing young birds from the nestbox for hand-feeding, they lose the chance to learn appropriate cultural behavior from their parents that may be important for breeding and caring for their own young when the opportunity arises.

Nevertheless, it has been our experience that hand-fed Golden Conures have an even stronger attraction for the companionship of each other than for humans. This behavior is a natural extension of their behavior in their native habitat. According to some sources, the birds breed communally, with several females contributing to the clutch. Both males and females rear the nestlings. At the 1989 AFA annual meeting in Phoenix, Arizona, DeDios reported that community breeding produced more hatchlings/year/pair than single-pair breeding. Although our breeding pairs are non-related, the individual

birds are of common parents and

therefore are housed in separate

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flights. We intend to retain one young offspring from our prolific breeding pair each year since the progeny of a successful breeding pair are also likely to be successful breeders.

A serious concern of breeders of Golden Conures is their tendency towards feather picking. Our birds, regardless of their parentage, pick their feathers at the end of the breeding season. This behavior lasts for about two to four months and varies in extent. Some of our birds pick their feathers one year but not the next. They often chew their tail feathers first, but sometimes only thin out the breast feathers. They may stop after only despoiling a single area of their body or in a worst case remove most, if not all, feathers from one area and then proceed to the next. We have had only one bird (a mature male) that continued with this unfortunate trait throughout the year. Following a thorough exam, it was revealed that the bird had severe visceral adhesions and was not capable of successfully mating with its healthy partner.

Alan Lieberman, Curator of Birds at the San Diego Zoo and keeper of the studbook for Golden Conures, told us that the birds must be distracted from feather picking and recommended either eucalyptus or mulberry branches for them to chew on. Fortunately we have access to a large supply of mulberry and found that a pair of Golden Conures can strip a seven to eight foot branch of its leaves and much of its bark in about three to four days. The use of branches creates a diversion and prevents severe feather picking. Another factor which helped to reduce feather-picking was to place fledglings in a flight cage next to their parents for observation. Although their feather picking is not as serious as experienced with the African Grey or some macaws, it is nevertheless distressing because of the innate beauty of these birds.

According to the 1990 edition of the International Studbook for the Golden Conure, there are 339 registered Golden Conures living in captivity but that is believed to be "only a fraction of the real flock that is now in captivity." As further stated in the studbook, by sharing information with other breeders, we are able to attain better genetic management and likely result in increased hatching and rearing of these beautiful birds. •



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