Pink Floyd

The Handrearing of a Chilian Flamingo and its Introduction to the Flock

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ink Floyd: to many people it is the name of a rock band that has recorded many classic albums such as "The Wall" and "The Dark Side of the Moon." To the personnel at the Oklahoma City Zoological Park, it is also the name of its first captive-hatched Chilean Flamingo, *Phoenicopterus chilensis*.

The Oklahoma City Zoo has exhibited Chilean Flamingos since 1966, but it was not until 1993 that any of the birds began nesting. Nesting did not occur until after the exhibit had been expanded and renovated and several new birds were added to the flock. The new birds brought the population to 23 (12 males 11 females).

The exhibit measures approximately 100 ft. (30m) by 60 ft. (20m) with a 20ft. (7m) by 10 ft. (3m) pool. Heavily planted flower beds surround most of the exhibit, which provide a comfort zone between the birds and zoo visitors. Dirt mounds were provided for the flamingos to use for their nests. Several pairs began producing eggs in May 1993 and continued to lay throughout the summer. The eggs were initially left in the nest under the



Floyd (second from right) seen as a member of the flock. He can be distinguished be the light gray down on the head and neck and by the lighter shade of pink on the body and wings. Shortly after Floyd was introduced to the flock, several pairs of flamingos successfully hatched and reared their young.

birds' care. However, after one of the first eggs disappeared from the nest, the remaining and subsequent eggs were pulled and replaced with dummy eggs. The eggs were placed in incubators at a temperature of 99.5° F. (37.5° C). The hygrometer was maintained between 82-84°F (30-31°C). The eggs were turned five times daily. A total of eight flamingo eggs were pulled from the nests.

The eggs were to be placed back in the nests when the chicks reached the air cell or pipped, the first steps in the hatching process. The chicks would then hatch under the parents and be raised by them. Midway through September, while eggs were still under artificial incubation, the nesting flamingos abandoned their nests. The following week, the first chick hatched after a 28-day incubation period. Out of the seven remaining eggs that were pulled, six were infertile and one died early in development.

In their natural environment, flamingos nest in colonies. Adult pairs will typically nest at the same time as other birds in the colony. Both parents incubate eggs and care for young. After

hatching, chicks stay in or near the nest for about the first week. After leaving the nest, chicks congregate with other chicks, forming creches or nursery groups. These creches can consist of several thousand young birds.

Adult flamingos take turns watching over the chicks. While the chicks are in the nursery, the parents continue to feed their offspring. Parents are able to recognize their chicks from their calls. After about five weeks, the chicks are able to begin feeding on their own, but usually do not fledge until about 12 weeks of age.

Hatching and hand-rearing only a single flamingo chick can pose a challenge. A chick requiring handfeedings and without other birds to associate while growing up would certainly become imprinted on people. Unfortunately, since the plan to place the hatching egg back under the adults was no longer possible, the chick would be hand-reared and later introduced to the flamingo colony.

After hatching, the chick was left in the incubator for 24 hours to absorb its yolk sac and dry off. The chick was then moved to a brooder box and provided with a heat lamp. The brooder box measured 8 ft. x 2 ft. (2.5m x .75m), with dividers 15 in. (45cm) high every 2 ft. (.75m). These allowed the boxes to be expanded as the chick grew. Outdoor carpet was used on the bottom of the box, which could be easily cleaned and disinfected. To help reduce the severity of imprinting, a small mirror was placed in the brooder box, which allowed the chick to associate with "another" bird.

The chick, named Floyd, was fed a gruel that consisted of 4 oz. (115g) blended smelt, 4 oz. (115g) krill, three cooked egg yolks, and 2.5 oz. (70g) Gerber® High Protein baby cereal. Two vitamin supplements, Vionate(D and D-Ca-Fos®, were added to the formula. The formula was blended into a semi-thick soup and fed through a syringe. Five feedings were given daily, plus an additional night feeding for the first three weeks. The chick was allowed to feed until it was full. For the first day, Floyd ate an average of 3cc of formula per feeding. During the first 30 days, Floyd averaged a 5.1% gain in weight (Table 2).

During the third week, a dish with ground smelt, krill and Flamingo Fare® (a commercial flamingo diet) was offered to the chick in addition to the syringe feedings. Water was added to the dish to soften the food and to allow the chick to filter feed. Floyd gradually became more interested in feeding from the dish than being syringe fed. By five weeks of age, he was refusing hand-feedings in favor of the dish diet.

As Floyd outgrew the brooder box, he was introduced to an enclosure used for wintering ibises, spoonbills, and waterfowl. Initially, he was kept in the room alone, but as the weather turned cold, other birds had to be brought indoors for the winter. Rather than immediately putting Floyd in a group of unfamiliar birds, he was placed in a "howdy" area so he and the other birds could gradually become acquainted with each other. A section of the room was fenced off with chicken wire, allowing Floyd to see the other birds, but not interact with them. After a few days, Floyd was allowed outside of the "howdy" cage.

Floyd did not associate with any of the other birds at first, instead preferring the company of keepers. But, after several days, he began to flock with 2.2 African spoonbills *Platalea alba*, which were the largest birds in the wintering facility with him.

After Floyd began showing interest in other birds, several attempts were made to introduce him to the Chilean Flamingo flock on display. Several introductions were tried on warm sunny days through the winter. However, the introductions were not successful, as neither Floyd nor the flamingo colony showed interest in each other.

The next spring, he was moved to the flamingo exhibit to be permanently placed in the colony. A "howdy" fence was set up, similar to what had been used before. Floyd was allowed to view the flamingo colony during the day, but was brought inside a barn for the evenings. Floyd remained in the "howdy" area for about two weeks before he was allowed to mingle with the colony.

Gradually, Floyd began to flock with the colony, but was still imprinted on people. To help him learn to associate with other flamingos, several birds from the flock were brought inside with him for the night. This continued for several weeks. By early summer, Floyd was associated with the flock well enough to be left out with it permanently. Throughout the transition, he gradually became less imprinted on people, and learned how to behave like a flamingo.

Today, Floyd can still be seen among the other Chilean Flamingos in

their exhibit. However, he has since outgrown his light gray juvenile feathers, and is now barely distinguishable from the other flamingos. With only a numbered leg band to accurately identify him, Floyd now appears to be as one with the flock.

Summary

The first Chilean Flamingo *Phoenicopterus chilensis* to hatch at the Oklahoma City Zoological Park was also the zoo's first hand-reared flamingo. The chick was raised on a syringefed diet, and soon became imprinted on people. Through a lengthy process, the chick was introduced to other birds and eventually returned to the flamingo colony without showing signs of its initial imprinting.

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Products Mentioned in Text

D-Ca-Fos® Natural Bone Ash with Vitamin D3
Supplement produced by Fort Dodge
Laboratories, Inc., Fort Dodge, Iowa,
50501.

Flamingo Fare® produced by Reliable Protein Products, Rancho Mirage, California,

Gerber® High Protein baby cereal produced by Gerber Products Company, Fremont, Michigan, 49413.

Vionate® Vitamin Mineral Powder produced by Gimborn-Rich Health, 4280 Northeast Expressway, Atlanta, Georgia, 30340.

References

del Hoyo, Josep, Elliot, Andrew, and Sargatel, Jordi, eds. Handbook of the Birds of the World Volume 1, Lynx Edicions, Barcelona 1992.

