Protocols for the hand-raising and care of cockatiels (*Nymphicus hollandicus*)

Corina Gardner

Introduction

Cockatiels (Nymphicus hollandicus) are native to Australia and were first identified in the mid 1700's. It is unclear when they were first imported out of Australia, but they were found in Europe in the 1800's and have been exported to all parts of the world in the last few decades. Thev have been bred in captivity for over a hundred years now.



Cockatiel foraging in the wild Ulf Gotthardsson

Cockatiels are intelligent, gentle and playful birds. They are usually very inquisitive and will thoroughly investigate anything everything that is around them. Individual cockatiels have very distinct personalities, behavior traits, and their own likes and dislikes. For example, grinding its beak indicates that the bird is sleepy and relaxed. These gregarious birds make one of the most popular pet birds today.

Cockatiels are naturally sociable birds and enjoy human contact. Handreared cockatiels are particularly easy to tame. Even cockatiels which have not really had very much human interaction but have been introduced into the company of humans adjust very well. Our cockatiels greet us when we get home by whistling and calling out. Most pet cockatiels even enjoy eating when their owners are having their meals. They crave attention and have a distinct call when they don't want you to walk away from them. They can sometimes be incorrigible. If they are aware that they a particular behavior will annoy you, then that's precisely what they will do.

General Guidelines for hand-rearing baby cockatiels

Often, young and inexperienced parents may abandon their nests and refuse to feed baby birds. Such a situation would demand immediate intervention and you will have to care for the baby birds yourself. If there happens to be another pair of cockatiels with a brood of chicks of a similar age, then chances are that the parents may accept and care for the abandoned chicks. Regrettably, this is seldom the case.

Hand-rearing a baby cockatiel is an extremely challenging and time consuming task that requires absolute dedication and patience. Baby cockatiels, which are also commonly called pinkies, are extremely delicate and fragile and therefore require immense amount of diligence while handling. As this is the most vulnerable part of their lives, special care must be taken to ensure the survival of these baby birds.

Feeding and hygiene

A disposable syringe, which is easily available in most medical stores, can be used for feeding the young birds. If unavailable, then the next best alternative would be to use an eye dropper or a plastic teaspoon. The slender tip of the spoon can be dipped in boiling water and then bent make a funnel, thus making it easy to use for hand feeding.



Disposable syringe feeder Devna Arora



Bent spoon feeder Corina Gardner

After feeding, the feeder (spoon, syringe or dropper) must be rinsed with warm water to remove any bacteria. Mild soap or detergent can be used to clean the feeder; however, it must be washed thoroughly so that no soap residue remains.

Baby bird formulae, for example, Kaytee Exact, available in most pet stores would be an ideal feed. However, as it is not easily available in India, baby formula like Cerelac can be used instead. If however neither of these is available, then a piece of bread can be crumbled in lukewarm milk and fed to the young birds - but I would only use this as a last resort. The formula must be prepared in a glass container as plastic containers tend to harbor bacteria. The consistency of the formula should be similar to that of a soft pudding - neither too thick, which would make it difficult for the baby to swallow and it may choke, nor too diluted as the baby could inhale the formula into its lungs causing aspiration. The formula must only be heated adequately before feeding the baby. Formula that is too hot will scald the baby bird's crop, causing crop burn. Crop burn is the scalding of a chick's crop and esophagus. For the same reason, formula must never be heated in a microwave. On the other hand, formula that is cold will cause sour crop. Sour crop is a condition in which the formula in the baby's crop has gone bad and the contents of the crop has not emptied.



Feeding the young bird Dylan Ashe

The baby bird can be placed on a napkin or towel on a table or kitchen counter and held gently while feeding. The aim is to emulate the parent bird as much as possible. Parent birds tap on the baby bird's beak to stimulate the feeding response. So, gently tap the bay bird's beak with the feeding instrument in a similar manner to encourage the feeding response. The feeding response is when the baby gapes for food, bobbing its head up and down. Parent birds then feed their chicks by inserting their beaks at an angle, through the side of the baby's mouth. They then regurgitate the food deep into the baby bird's mouth. Therefore, insert the tip of the feeding syringe at an angle at either sides of the baby's beak. Press the plunger slowly, stopping every now and then, so as to allow the baby time to swallow. The speed of feeding must never be hastened. Enough time must be allowed for the baby to swallow its food before pressing on the plunger any further. Once its crop is full, not over-extended, and it has had enough to eat, the baby will stop gaping and refuse to open its beak. Feeding must be stopped immediately. Over feeding can cause formula to flow into the throat and down its windpipe, which can be life threatening. The baby must not be forced to feed when it is reluctant to accept food. The beak and feathers of the baby must be wiped gently with a warm, damp cloth after feeding.

1-7 day old baby



New born cockatiel Dylan Ashe

1 week old cockatiel Dylan Ashe

Ideally, feeding should start at 6 a.m. and continue until midnight. The baby should be fed every 2 hours. A day old chick would require approx 1 ml of formula per feed, which can be gradually increased to 2 ml by the 4^{th} day and 3 ml by 7^{th} day. It is unnecessary to give the baby any additional water as they receive sufficient fluids in their feed itself. It is unnecessary

to feed the baby at night as in nature, parent birds as well as their babies sleep at night.

2-3 weeks



3 weeks old cockatiel Dylan Ashe

Pin feathers begin to erupt in the second week of the baby's life & the eyes usually open around the 8^{th} -10th day.

The baby can be fed every 3 hours. The feed quantity must be increased to 4-5 ml per feed. Feeding must still begin by 6 a.m., however, the last feed could be given by 10 p.m.

3-4 weeks



4 weeks old cockatiel Dylan Ashe

The baby still has a few pin feathers. The formula should now be of a thicker consistency and the feed quantity can be increased to 6 ml per feed. The frequency of feeding can be decreased to a feed every 4-5 hrs.

The baby's crop usually empties within 4 hrs. A crop that remains full or does not empty completely within that time indicates that there is a problem.

The crop is a muscular pouch near the throat of the baby bird that is used to store excess food for subsequent digestion.

4-5 weeks

The baby birds start to develop flight feathers by this age and are now called fledglings. They also start foraging (searching for food) themselves by this age. Feed quantity can now be increased to 8 ml per feed and the frequency of feeds can be decreased to 2-3 feeds a day. The weaning process must begin by the time the baby is 5 weeks old.



5 weeks old cockatiel Dylan Ashe

Weaning foods such as greens, bits of toast and bread, crushed and grated boiled eggs (along with the shell) and cream cracker biscuits can now be offered to the young birds. This mixture easily digestible is an substitute and ideal during rearing of young birds. Mixed bird seeds such as millet (durra), foxtail millet (kheri), finger millet (ragi), sunflower seed, etc. should also be given to the birds.

6-7 weeks



Juvenile cockatiel Corina Gardner

The young bird is quite independent now and it's time to transfer the bird to a cage. Although they feed well by themselves at this age, they must be watched vigilantly to ensure they are eating well. If necessary, feedings can be continued once or twice a day.

Mixed bird seed, which is available in most pet stores, should also be given to the bird. In the event that bird seed is unavailable then large millet seed (bajra), finger millet (ragi), foxtail millet (kheri), sunflower seed (suraj mukhi), safflower (beni or kardi) seed, pumpkin (kaddu) seed, boiled maize (makki) and soaked gram (chana) can be provided. It's always advisable to offer the young birds entire or un-hulled seeds as hulled seeds tend to decay and mold. Seeding grass, French beans, and carrots are always a welcome treat as well. Green leafy vegetables such as lettuce, mustard sprouts, millet sprouts and fenugreek (methi) leaves is essential along with other weaning foods. By 8 weeks of age, the bird should be completely weaned.

Foods that are toxic for cockatiels include apple pips, avocado (makhanphal), cherries and peaches (aadu). Never give your birds chocolate, as it may make your bird seriously ill.

In the event that the bird suffers an upset stomach or diarrhea, indications of which include watery green droppings, a pinch of Ridol or Kaltin or any other binding tablet can be crushed and mixed in a half container of water and offered instead of plain drinking water.

Grit, which is a mixture of sand and stones, and cuttle-bone, which is rich in calcium and phosphates, should be given to the birds periodically. Clean, fresh drinking water must be provided daily. The feed and water containers must never be placed directly beneath perches as the bird's dropping will foul the contents.



Cockatiel bathing Matrixphere

It's also a good practice to provide a shallow dish for the birds to bathe in. Another option would be to use a spray mister (plant atomizer mister), filled with warm water, not hot water. Many a time you'll find your bird flapping its wings and hanging upside down from its perch, this usually indicates that the bird wishes to bathe. You will know that he is enjoying his bath when he puffs out his feathers, raises both his wings up and away from his side and leans forward.



Enjoying a mist bath Lianne

Housing the young birds

A shoe-box or small cardboard box with adequate holes for ventilation, a wicker basket or even a small aquarium may be used to house the young birds. The box can be lined with a soft towel at the base and a few layers of tissue papers on top of the towel, making it easy to change the paper towels when dirty. The box must be placed in a warm, dry place, preferably near a source of warmth. A heating lamp, with a light bulb of maximum 40 watts, can be placed above the box. The lamp must be placed at least 12" away from the box. The ideal temperature for the baby

birds would be about 35.5° Celsius (or 96° Fahrenheit). Again, it is crucial to be vigilant and ensure that the baby is not being overheated. A clear indication of overheating would be when the baby's beak is open (as if panting) and wings are held away from its body. On the other hand, if it's huddled and shivering, it is not receiving enough warmth. At night, partly cover the box with a light towel to keep out the light from the heating lamp and thus enable the baby to sleep.

It must be noted that the purpose of the lamp is to provide warmth alone, and not light, and it must never interfere with the natural light patterns and disrupt the baby bird's sleep cycle. In nature, cockatiels nest in hollow tree trunks in wooded areas, where not much light enters. Even when in captivity, the parent bird sits on the baby, shielding it from most of the light. The heating lamp may be discontinued after the baby crosses 2-3 weeks of age and is covered with its first layer of feathers.

Ants are a real danger to baby birds and can fatally hurt them. It must be ensured that there are no ants in the vicinity of the bird.

Once shifted to a cage, it must be ensured that the cages are spacious enough to allow free movement between perches. Perches should be placed just above the floor of the cage so that the bird can easily climb onto them. The cage must be located in a well lighted location with a source of natural light such as sunlight. Avoid exposing the birds to a cold breeze or draught, especially at night, as this causes chills and other health problems.

Fresh, natural branches of Indian lilac or neem (*Azadirachta indica*) and other trees should be provided as perches as this helps to keep the feet and claws of the birds healthy and strong. It not only strengthens their jaws and sharpens their beaks but keeps them occupied as well. Birds are otherwise prone to boredom and feather plucking.

It's advisable to cover the cage with a cloth at night as it gives the bird a feeling of security. If you get too near the cage at night, you might find him hissing. This is a fine demonstration of his protest to your invading his personal space and literally translates as, "don't get in my face". Beakbanging is a common male cockatiel trait that indicates he is looking for attention.

Clipping toenails

In the wild, birds' nails are naturally smoothened out on a range of surfaces but this may not the case in captivity. However, if it transpires that your bird's nails have grown too long then clipping them becomes inevitable.

Overgrown toenails are likely to get caught on a perch, cage wire, tray or fabric. This can cause deep discomfort, distress and even injury to your bird. Clipping a bird's nails is a traumatic event at the best of times, both for the bird and the owner, and so it must only be done when the bird's nails are very overgrown.



Special nail clippers, which have a rounded edge, should be used to trim the nails of your bird. Take care to only clip the tip of the nail, clipping too much will cause the toe to bleed. If the toe starts to bleed, Nebusulf powder which contains the antibiotic Neomycin, must immediately be applied to the wound.

Nail clippers for birds Corina Gardner

Sexing Cockatiels

Both males and females look remarkably alike especially until they reach sexual maturity. One way to distinguish between the sexes is that the males sing and whistle while the females don't. Males have bright orange patches on their cheeks, while females have duller patches. Another distinguishing aspect is that females have pale yellow/white dots on the underside of their wings and yellow/white barring on their tails. Males simply do not have this characteristic.



Adult male Brett Donald

Adult female Lucy

Cockatiels are not generally aggressive and have a good natured disposition. However, in the event that male cockatiels are kept together in a cage, there is a possibility of the dominant male pecking the more timid male, perhaps even preventing it from eating. The solution would be a larger cage with two food trays and two water trays. If however, the dominant male continues pecking the timid male, than separate the birds into different cages.

Egg binding

Egg binding is a medical condition when a female bird is unable to expel an egg. Egg binding can pose a serious threat to cockatiels. Younger females are at a greater risk of dying from egg binding. In the event that a female cockatiel is suddenly puffed-up and listless, it is quite likely due to egg-binding.

The female must immediately be placed in a small cage or shoe-box and provided with additional warmth. A heating lamp would be ideal. Castor oil or even cooking oil can be gently applied in to the birds vent or cloaca, with a Q-tip (a cotton bud) to lubricate the area and facilitate the passing of the difficult egg. One drop of castor oil given orally will also help the passage of the egg. If these basic requirements are provided it is unlikely that the bird will suffer any serious health issues.

Breeding

Cages for breeding cockatiels should be an average size of 20"X20"X50". The nest-box in the breeding cage should be 9"X11"X12" with a 2" opening. The nest-box can be mounted on the outside of the cage. Most cages now come equipped with a small door at the side of the cage which can be used as an entry to the nest-box. If on the other hand birds are housed in aviaries then the box can be placed inside the aviary itself. Nesting material should consist of pine shavings, shredded paper & freshly cut grass.

Cockatiels live for an average of 15-20 years in captivity and breed well in captivity. Males mature by 12 months of age while females mature by 18 months of age. When a female cockatiel is ready to mate she will sit low on a perch with her tail in the air while emitting a peeping sound while males will tap their beaks on the cage to gain the female's attention. The eggs are laid a week after mating. The eggs hatch after a period of 21 days. Cockatiels usually lay a clutch of 4-8 eggs, twice a year.

Freeing cockatiels

Freeing cockatiels is just not an option as they will surely be attacked and killed by other predatory birds such as hawks, kites, shikras, crows, etc. as they are vulnerable and unable to fend for themselves. They will also be vulnerable to other predators such as cats, snakes, rats, etc. unless they can find themselves a safe place to roost.

In the wild, cockatiels forage for grain (usually on farms), feed on grass seeds, leaves, vegetables and fruit. Locating such food sources, especially in environments they are not native, would be extremely difficult. Needleless to say, this would be even more difficult in a city.

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Corina Gardner. Juvenile cockatiel.

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Further reading:

Excellent photographs on the entire stage of cockatiel chick development by Dylan Ashe can be viewed through the following links http://www.flickr.com/photos/ackook/page47/ http://www.flickr.com/photos/ackook/page48/ http://www.flickr.com/photos/ackook/page49/