

Rehabilitation of baby Ring-necked parakeets (*Psittacula Krameri*)

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Parakeet chicks
Nupur Buragohan

Introduction

Ring-necked parakeets (*Psittacula Krameri*), also commonly known as Rose-ringed parakeets, are commonly found in many countries around the globe including India, Pakistan, Burma, Nepal, Sri Lanka, Bhutan, Tibet, China and countries in the central African belt. They have also been introduced, either deliberately or accidentally, to many parts of the world including Southern Africa, Middle East, Western Europe, Northern America and Australia.

They are the most common of the parakeet species and have established huge populations all over India. Although, their natural habitats are forests, farmland and woodland adjoining cultivated areas, they are also found in towns, villages

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and cities all over the country. In their natural habitat, parrots nest in cavities in trees and in hollow tree trunks. In urban landscapes, the parakeets will readily nest in man-made nest boxes, the eaves of roofs and cavities in buildings. Often foraging on the ground for food, their diet consists of seeds, nuts, berries, blossoms and fruits. Flocks of parrots fly several miles a day to forage in farmlands and orchards. They can be pests to farmers especially during the harvest season. They also readily accept food from bird tables all over the world.

Behavioral characteristics



A wild Ring-necked parakeet

Devna Arora

The average size of an adult ring-necked parakeet is 16" from its beak to tail. Adult males are green with a bluish hue on their nape. Males attain full plumage by 2 years of age. A black ring runs around their neck, through the chin and along the lower cheek, and blends into a pink collar. The outer tail feathers are green,

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while the center tail feathers are blue, and end in a yellow-green tip. Females do not have a black ring on their neck, though generally they have a very pale ring. Psittacines are long lived birds and the average lifespan of free ranging ring-necked parakeets is documented to be between 20-30 years while those in captivity have been recorded to be well over 30 years.

Although, Ring-necked parakeets are a noisy, gregarious species, they are extremely intelligent, individualistic birds and non-aggressive birds. With a vocabulary of over 250 words and their quirky behaviors, ring-necked parakeets make charming pets. Ring-necks are great talkers, are very curious birds and they thoroughly enjoy human interaction. Even though they are hugely popular pet birds in the west, Ring-necked parakeets are currently listed under Schedule IV of the Wildlife (Protection) Act 1972 which makes it illegal to own parakeets in India. While CITES only permits trade of a specified quota of captive-bred parakeets.

General guidelines for hand-rearing parakeets

The female parakeet lays her eggs on alternate days until the female lays about 3 or 5 eggs per clutch. Incubation occurs soon after the hen lays the 2nd egg, and the first chick hatches after approximately 24 days. The chicks are actively reared by both the parents. The female incubates the eggs and rarely leaves the nest while the male takes on the responsibility of feeding her and the chicks. Do not disturb the parents when they are sitting on the eggs. However, hand rearing often becomes necessary when you find that the parent birds are not feeding the baby and the baby is getting progressively weaker. Such a situation would demand immediate intervention and you will have to care for the baby birds yourself.

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Babies are sometimes found if they accidentally crawl out of the nest (which may be due to several reasons). This is common during the fledgling stage. If the nest is intact, the babies may simply be picked up and placed back in the nest. Babies are also found if the tree falls due to natural causes, or in rare instances, is felled by humans before checking for existing nests. Chicks sometimes get displaced when inexperienced females are not able to build secure nests and they may get exposed or blow away in the gusty storms of the pre-monsoons. Try and locate the presence of the parents before rushing to the rescue of the little birds. Do not rush to the chicks if the parents are nearby as you will only scare them away. The most ideal action in such an instance would be to build or offer an artificial nesting site to the parents.

Ensure the safety of the chicks from a safe distance away while preparing and installing the artificial nest. Only if the chicks seem to be in danger or in uncomfortable positions, may they be cooped up and temporarily placed in a basket. But keep the basket in view of the parents so they don't lose hope. Avoid exposing the chicks to direct sunlight or rain and keep them well sheltered and warm.

The simplest option for an artificial nest would be to place an earthen pot (the size of a basketball) or a wooden nest box at the site of the original nest. A covered wicker basket may also be used for the same purpose. Ensure to secure the nest firmly to the tree or wall and make sure it has an entrance hole of about 4" diameter. Make some holes to the bottom of the pot/box to allow drainage of excess water. The box must be placed in an adequately sheltered place whereby also providing sufficient camouflage for the parents. You can line the nest with a soft hand towel but refrain from doing too much. If they feel the need, the parents line the nest in a manner that is most appropriate for them.

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The last alternative would be to shift the chicks to another location – either another natural cavity or artificial nest box. In case you are required to shift the chicks, ensure to do so in view of the parents so they can follow you and locate the chicks. Once the chicks have been shifted and placed in the new nest, ensure to move away from the area and keep an eye on the chicks from a good distance away so as to give the parents plenty of space to return to the nest. The parents should return and start feeding the chicks in a couple of hours. Once, you have observed the parents feedings the chicks for a few time, you may move away – the chicks are now safely back home. Subsequent visits to check on the chicks must be made from a distance. At no point must you approach the nest and disturb the parents.

Babies may be admitted for care if the parents fail to return (normally in the case of death) to the nests and care for the young ones. Babies may also be admitted temporarily if they are found to have grave injuries, in which case, they may be returned to the nest after appropriate and adequate treatment and healing.

Ring-necked parakeet chicks are also commonly confiscated from illegal traders. Such chicks must all be admitted for hand-raising and rehabilitation and released after adequate training and at an appropriate age when they are able to fend for themselves.

Feeding and hygiene

A disposable syringe, which is easily available in most medical stores, can be used for feeding the young birds. Syringe feeding is faster and less messy. However, if unavailable, then the next best alternative would be to use an eye dropper or a plastic teaspoon. Spoon feeding maybe lengthy and messy, but its ultimately beneficial as you could use thicker consistency of feed towards the end of the

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hand-rearing process. 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.

The last option would be a crop needle (medication tube). Crop feeding is the fastest, most effective method of feeding and may be used for babies that refuse to accept feed. A piece of pipe is fitted in front of the syringe and inserted through the beak into the crop. Crop needles should be a last option and only used by experienced handlers as they can perforate the crop if not used carefully.

Feeders should be disinfected before and after use. The feeders (spoon, syringe or dropper, or crop needle) must be rinsed with warm water to remove any feed residues. Mild soap or detergent can be used to clean spoon feeders; however, it's very essential that it must be washed thoroughly so that no soap residue remains. Droppers, syringes and crop needles all need to be sterilized before use.

Feed for baby birds

Baby bird formula, for example, Kaytee Exact, available in most pet stores is ideal for baby birds. However, as it is not easily available in some parts of India, baby formula like Cerelac can be used instead. To ensure that the highest levels of hygiene are maintained, only boiled water must be used to prepare the feed. Water must be boiled and then cooled before use or the formula will be too warm for the chicks to consume.

If however, neither of these formulas is available, then a piece of bread can be crumbled in lukewarm milk and fed to the young birds – but this should only be done as a last resort. The formula must be prepared in a glass container as plastic containers tend to harbor bacteria. Never prepare formula in dirty containers. Prepare formula for just one feed at a time, and always discard any leftover food.

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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. Formula which is microwaved causes hot spots – such unevenly warmed-up food can scald the bird's crop causing crop burn. 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.

Feeders should be disinfected before and after use. The feeder (spoon, syringe or dropper, or crop needle) must be rinsed with warm water to remove any bacteria. Mild soap or detergent can be used to clean the spoon feeders; however, it's essential that it must be washed thoroughly so that no soap residue remains. Droppers, syringes and crop needles must all be sterilized before use.

Feeding instructions

The baby bird can be placed on a napkin or towel on a table or kitchen counter so you can feed the baby in a comfortable position. Our aim is to emulate the parent bird as much as possible and provide a simulated environment that is as close as possible to its natural setting. 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 senses food and gapes, bobbing its head up and down. Parent birds then feed their chicks by inserting their beaks at an angle,

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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.

The baby's crop usually empties within 4 hours. A crop that remains full or does not empty completely within that time indicates that there is a problem. Never feed the baby while there is leftover food in the crop, instead pour a few drops of lukewarm water into the bird's beak and gently massage the crop, NEVER press too hard. The crop is a muscular pouch near the throat of the baby bird that is used to store excess food for subsequent digestion.

Stage wise care and feeding instructions for the chicks

1–10 day old chicks

New born parakeets are born totally pink, featherless, blind and completely helpless. Fresh hatchlings require extensive care and need to be fed almost round-the-clock.

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2-3 day old parakeet chicks

Nupur Buragohan

Ideally, feeding should start at 6 a.m. and continue until midnight. The chicks should be given 10 feeds a day at intervals of 2 hours. A day old chick would require approximately 1 ml of formula per feed, which can be gradually increased to 2 ml by the 4th day and 3 ml by 7th day. The feedings can also be reduced to 8 feeds by the end of the 10th day. One or two feeds – one around mid-morning and one around mid-afternoon, may be replaced by mashed/pureed soft fruits like banana, mango or papaya instead of the formula.

It is unnecessary to give the baby any additional water as they receive sufficient fluids in their feed itself. It is also unnecessary to feed the baby at night as in nature, parent birds as well as their babies all sleep at night.

N.B. Keep in mind that a newborn baby is often not fed for about the first 8 hours of its life.

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10 days – 4 week old chicks

Pin feathers begin to erupt in the second week of the baby's life. The baby can be given about 7 feeds a day, 3 hours apart. The baby would consume 4 ml per feed by the 10th day which can steadily be increased to 5 ml per feed. Feeding however must still begin by 6 a.m. and the last feed could be given by 10 p.m.



The baby can now also be fed on a combination of formula and fruits. Mashed/pureed banana, papaya, mango, sapodilla (chiku), pears are good options to add to their diet. You can either offer them a mix of formula and fruit, or the feeds may be alternated with formula in one feed and fruit in the other. Avoid repeating any one fruit over and over again; instead, it would be better to offer them different fruits at intervals. This would be easier for them to digest and also ensure an intake of varied nutrients from different fruits.

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4th – 5th week

The baby birds start to develop flight feathers by this age and are now called fledglings. The baby parakeets would now consume at least 6 ml per feed and can now be given 3–4 feeds a day, about 4 hours apart. As the consistency of their feed is now thicker, syringe feeding may be discontinued. Instead, the chicks may be fed by the hand or with a pair of blunt-tipped forceps. They also start foraging (searching for food) themselves by this age. The weaning process must begin by the time the chicks are 5 weeks old.



Parakeet chick feeding on its own

Nupur Buragohan

The chicks can be fed on a diet consisting of fruit mixed with bread or crumbled up biscuits (marie or cream cracker biscuits would be appropriate). It is also an ideal time to add *Sattu* or *Chhatua* to the chick's diet. The chicks may be offered a feed of *Sattu* or *Chhatua* in every alternate feed. On purchase and before use, the *Sattu* or *Chhatua* flour must be slightly roasted and then blended in a dry-mixer

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and stored in containers – this retains the nutrient value of the mixture and gives it a better shelf life as well. Much like wheat flour, the flour may be kneaded into dough and rolled into small bite-sized portions for the chicks to feed on.

6th – 7th week

The young bird is quite independent now and it's time to transfer the bird to an outdoor enclosure. Although they feed well by themselves at this age, they must be watched vigilantly to ensure they are eating well. If necessary, hand feeding can be continued once or twice a day. A bowl of fresh water must be available at all times for the chicks as they will now begin to drink water.



Supplemental feeding, if required

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The young birds may be offered fruit chopped into small pieces, hulled seeds, soft and shelled nuts, cooked grains, pieces of biscuits (marie or cream crackers), etc.

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you can also start introducing some nuts to their diet at this stage.

8th – 9th week

By 8 weeks of age, the young bird should be completely weaned.



A fledgling parakeet

Nupur Buragohan

Offer the young parakeets a varied diet by this age. Allow them to explore and make choices for themselves. Their diet can now include a variety of fruits, whole nuts and unhulled seeds, cooked and raw (whichever your birds prefer) grains like rice and corn, cucumbers (they like the seeds), chilies, etc. Offering the young birds an assortment of some wild-collected berries and seeds is also an excellent addition as it familiarizes them with the kind of foods available in the wild.

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Adult bird diet



An adult parakeet feeding on seeds

Devna Arora

Mixed bird seed, which is available in most pet stores, may also be given to the birds. In the event that bird seed is unavailable then large millet seed (bajra), paddy(dhan), finger millet (ragi), foxtail millet (kheri), sunflower seed (suraj mukhi), safflower (beni or kardi) seed, pumpkin (kaddu) seed, boiled maize (makki) or corn on the cob (bhutta), and cooked rice can be provided . Soaked gram (chana) and fresh sprouts are also an option for the birds. Fruits like guavas, papaya, mango, sapodilla, figs, grapes, must also be added to their diet. 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 are essential along with other weaning foods. Tamarind and chilies may also be offered frequently as they are high in vitamin C and enjoyed by the parakeets. Cuttlebone is a good source of calcium and helps to trim their beaks.

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Foods to be avoided

Foods that are highly toxic for birds include apple pips, avocado (makhanphal), cherries and peaches (aadu) and must never be given to the birds. Never give the birds chocolate, as it may make the bird seriously ill.

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.



Nest basket and chicks in the basket
Nupur Buragohan

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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, budgies 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.

Preening

Parakeets frequently preen their feathers. Birds use their beaks to preen their feathers and keep them in good condition. Preening is an essential way for birds to keep their feathers neat and trim.

Bathing

A bath once or twice a week during the summer months and once a week in the winter or monsoons should suffice. Birds that enjoy their baths would appreciate frequent opportunities to bathe, while those that don't must not be forced. Each bird is different and some may prefer a spray of water while others may prefer a dish of water.

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Spray misters or plant sprayers (plant atomizer mister) are ideal giving your bird a mist bath. The mister may be filled with warm water – never use hot water. Spray just above the bird's head, so that the spray settles gently on the bird. It's also a good practice to provide a shallow dish of water for the birds to bathe in.

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. Some may even sit in their water bowl or dip their head in-and-out of the bowl to indicate their wanting 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.

Rehabilitating the young parakeets

By the age of 3 months, the young parakeets should be shifted to an aviary, preferably one with some fruiting and seeding trees. They must be provided with a nest box to retire in at night and during harsh weather. Human contact must be withdrawn from the birds and they must be encouraged to be independent.

Avoid placing a feeding table in the enclosure. Instead, place the food in different sections of the enclosure every day. The placement of foods must be rotated so as to encourage 'searching' behavior in the young birds. Food must also be placed at different height levels so as to get the birds used to foraging at various levels of height. The birds must be offered a variety of foods to prevent dependency on any one food type. A significant proportion of their diet must now comprise of wild-gathered foods as it will assist their transition to the wild and help them recognize readily available foods. The birds must have access to fresh drinking water at all times and they must frequently be given provisions to have a bath.

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Pre-release aviary

Devna Arora

Soft release

By the age of four to five months, the young parakeets will be ready to explore the outside world. Ring-necked parakeets are not only found in forested landscapes but also commonly found in urban and rural environments. Their adaptability makes it easier to release them in any convenient surroundings where they will be able to find sufficient forage.

By four to five months of age, the parakeets may be allowed to exit the enclosure via a window (an opening) in the aviary. The window may either be on the side or the top of the aviary. The window must be opened early in the morning and closed by sunset. The birds will initially fly around and come back to the enclosure for a few weeks. As they grow older and have explored their surroundings

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thoroughly, they will begin to stay away for longer durations of time, until they have established a territory of their own and no longer feel the need to return to the enclosure. They should be completely independent by 6 months of age.

Hard release

Although a soft release is ideal for hand-raised birds, there may be instances where you may have to opt for a hard release for the young parakeets. The minimum age at which the bird may be released is 6 months of age. Habitat selectivity may carry more importance when opting for a hard release and hard released bird may fare better in forested landscapes.

Grouping birds before release

Parakeets are highly social birds and may live in large flocks in the wild. The birds must always be grouped before release. Under drastic conditions, for e.g. if you don't have enough parakeets, you may choose to make a mixed-species group before release. Encouraging this unnatural sociality will benefit the young birds as they will depend upon each other after release until they are confident enough to go their own separate ways.

N.B. It may be illegal to release ring-necked parakeets in countries that they are not native to. Please seek guidance from the relevant authorities or rehabilitators before release any non-native species of wildlife as they may seriously threaten and decimate native flora and fauna.

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Signs of sickness in parakeets

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 female birds. 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 quiet and 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.

Abnormal droppings

Green droppings usually indicate an infection. Birds fed on soft food and greens may normally produce green and watery droppings, but if the droppings carry an odor and persist over a period of time (especially if the bird is fluffed up, lethargic and has a loss of appetite), it indicates a chill or an infection. 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. The infection should likely subside in a day or two and the medication may be discontinued a day after the bird has returned to normal health.

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Zoonotic diseases

Parrot fever

Parrot fever (also known as Psittacosis, Chlamydiosis or Ornithosis) is a bacterial disease caused by the bacterium *Chlamydia psittaci*. Parrots, cockatiels and lovebirds are especially susceptible to this disease. The symptoms include nasal discharge, listlessness, loss of appetite, greenish stools. Exposure is usually due to the inhalation of dried bird droppings that contain the bacterium. Infection can also occur from respiratory secretions and feathers. Infected birds should immediately be isolated, and protective clothing should be worn while attending to these birds. Antibiotics like tetracycline hydrochloride or doxycycline can be mixed with the bird's drinking water and administered to the infected birds for 45 days.

Newcastle disease

Newcastle disease is a rapidly spreading, highly contagious viral disease of birds. The disease is transmitted through the droppings and secretions of infected birds. The virus can also be picked up through contaminated feed, water, shoes and clothing. Common signs include twisted necks, tremors, and leg paralysis. There is usually 100 percent mortality among infected birds.

Stringent quarantining of the infected birds should be used so as not to spread the disease from one location to another. Protective clothing, shoes and disposable gloves should be used as precautionary measures to avoid contamination. Antibiotics such as or Tetracycline hydrochloride may be used for treating infected birds.

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