

Hand Rearing Birds

There is no doubt that birds that are parent raised have better cognitive and socialisation skills than birds that are raised in isolation from other birds. Where possible, we recommend that birds are kept with their parents and are handled in the nest as chicks so they have a mutual relationship with both humans and birds. This reduces a lot of behavioural problems that we see commonly in captive birds. For more information on this topic please see our "Human Bird-Bond and its impact on Companion Bird Behaviour" handout.

However, there are some situations where birds do require hand raising by humans. This should only be performed by experienced bird keepers or someone with guidance from an experienced mentor. We see many young chicks each season that have health issues in the first few weeks of life due to incorrect husbandry and feeding.

When to Start

When a chick is getting ready to hatch from the egg they start absorbing what remains of their yolk. This yolk, once absorbed, can sustain them for the first 24-48 hours after hatch. Many aviculturists and avian veterinarians recommend feeding fluids or very dilute formula at this stage, gradually thickening the consistency of the formula over a 3 or 4 day period. A commercial science based hand raising formula is best. It is advised to be prepared when breeding birds and to have this on hand, in case a chick does need emergency hand raising. When raised from the egg, feeds usually start 1 hour apart for the first few days. The amount of formula to feed is determined by the weight of the chick and the species of chick that you are raising. Consult your avian vet or mentor if you are unsure. As a general rule you would feed until the crop is full. It is extremely important to be weighing your chicks daily, before the first morning feed. This not only shows you that your chick is growing at a suitable rate but it also gives you an indication of health. If the chick's weight maintains or drops for a few days, this could be the first sign of a health concern. At this stage, you should get your chick to an avian veterinarian before they start deteriorating in demeanour.

If you are removing chicks from the nest for hand raising, we recommend doing this at a few weeks of age. Not only does this mean that the parents are doing the hard work of hourly and 2 hourly feeds but it also means that the chicks have gained a lot of beneficial gut bacteria from the parents. Usually at this age, most species are on 4 hourly feeds, 5 times a day, this can vary though depending on species. It is strongly recommended to raise 2 or more chicks together and not to raise a single chick on its own. Single chicks, raised alone, can develop a host of unwanted behavioural problems when they reach sexually maturity.

Housing

The nursery may consist of brooders, paediatric units or similar enclosures that have observation windows and temperature and humidity controls. Proper environmental conditions are essential for normal feeding response and efficient digestion. Young birds should be watched closely for evidence of chilling or over-heating. With either extreme in temperature, the birds will grow more slowly and the rate of crop emptying and digestion of food may be delayed or stopped. Birds that are too hot will pant and if feathered may sit

with their wings outstretched to try to cool down. Birds that are too cold may shiver and huddle together. The ideal relative humidity is greater than 50%. An ideal temperature for an unfeathered chick is between 32-34°C and for a chick with feathers is 25-27°C. It is extremely important that even in the summer months that an external heat source is still provided to allow for a consistent temperature. Fluctuations in temperature can cause delays in growth, crop motility and altered feather development. Hot water bottles and hot packs are not considered an adequate method of providing heat for a growing chick.

The substrate used in the raising boxes is very important. If the bottom of the box is too smooth then this can lead to developmental problems such as splayed legs. We recommend using a bird safe kitty litter such as Breeder's Choice, a recycled newspaper kitty litter, or a wood based kitty litter such as Ozpet. The bedding should be changed regularly with each feed. Once a chick is fully feathered and starting to climb out of their raising box, then they can be moved to a small cage with low perches. Until they fledge it is likely that they will still prefer to sit on the ground as they would in a nest. Providing perches low to the ground ensures that they don't get stuck up on a perch and are unable to climb down to explore their food and toys. It is really important to start introducing toys and objects to them at this age so they are comfortable with new items in their cages.

Feeding Procedures

Formula diets **MUST ALWAYS** be prepared fresh for each feed. Leftover feed **MUST** be discarded. Harmful bacteria grow rapidly in leftover formula. Formula should be fed warm at a temperature between 40-45°C. It is not recommended to heat formula in the microwave due to 'hot spots' in the feed. It is best to use a mix of cold and freshly boiled water to reach the desired temperature. Crop burns are a common trauma that we see in the breeding season from feeding food that is too hot. They can be avoided by using a thermometer to check the temperature before feeding. Formula temperature can be maintained by sitting the formula bowl in a larger bowl of hot water, ensure the temperature is checked regularly over the feed.

We recommend feeding chicks using a syringe. With this method you can monitor exactly how much formula each chick is receiving with each feed. It is recommended to have a hand raising sheet to document each chick's daily weight, time and quantity of each feed. This is not just good for your own knowledge and record keeping, but if a chick is unwell, then this can be used to determine when the chick started to become unwell. You can find a "Hand Rearing Chart" template on our website.

The feeding response of most bird species can be elicited by gentle finger pressure on the corner of the bird's beak (commissure). Warm food will also elicit a feeding response in a healthy bird. Baby birds should only be fed if a strong feeding response is encountered. Feeding should not be attempted if a feeding response is absent or if the food is cold. Force-feeding without a feeding response can result in aspiration of the food, possibly leading to death.

You do not have to wait for the crop to be completely empty prior to each feed. It is acceptable for the crop to have a small amount of food present from the previous feed as long as the crop empties once in a 24hour period, usually this is overnight. Spilled food should be cleaned from the bird's mouth and body before the bird is replaced in the cleaned brooder.

Disease Prevention

Baby birds have a limited ability to resist disease, so sanitation and disease prevention are extremely important.

Sterilisation of feeding utensils, disinfection of counter tops and the brooder, and frequent hand washing are essential. Remember that the dishwasher does not disinfect. Wash all utensils with soap and water, rinse, then disinfect. Rinse disinfectant off utensils with clean water before use. We recommend Milton Antibacterial Solution or a veterinary grade disinfectant such as F10.

Disease prevention is essential. Do not mix clutches of young from different nests and do not introduce babies or birds from another facility to your nursery. Use separate feeding tools for each bird or clutch. Also make sure that any quarantined or unwell birds are not housed in the same room that you use as your nursery.

Weaning

In the wild, weaning doesn't occur until well after fledgling. This period of development is extremely important for developing cognitive skills. Unfortunately, in captivity a lot of breeders will wean at the time of fledgling. When birds fledge they naturally lose 10% of their body weight and start to refuse food for a couple of days as they learn to fly. Many breeders take this as a sign that they are ready to wean and stop formula altogether, this is referred to as "Crash" or "Abrupt" weaning. However most birds will return to feeding after a couple of days when they have lost their 10% body weight. We recommend that breeders take a natural approach and "abundance" wean. This is where you continue to offer formula to birds once they have fledged for a few weeks or even months for larger species. This also allows birds to have time in a crèche and learn bird behaviour from other chicks that they are raised with. The benefits of this are discussed in our handout "The Human-Bird Bond and its Impact on Companion Bird Behaviour". We cannot stress enough the life-long positive benefits that abundance weaning and extended crèche period has for the mental health of our companion parrots.

Once baby birds begin to show an interest in their surrounds and start picking at little spots in and around their environment then food can start to be offered. We recommend that birds be weaned onto a pelleted diet with a large variety of fruit and vegetables. You can also offer a sprinkle of seed so they can recognise it as a treat. Once they go from picking at their food to eating larger amounts then their formula feeds can start to reduce. This is an important time to continue weighing your chicks. If they have fledged then you can feed them on a T- stand which can be placed on a set of scales, this can also be the start of 'station' training. By weighing daily you will know if you have reduced the feeds too fast or if they need their formula feeds increased again. We recommend to start removing the formula feed in the middle of the day first. After a week, if their weight is stable and their appetite is increasing, then the morning feed can be stopped. Complete weaning should occur once your chick is no longer begging for their food. If your bird is no longer on formula feeds but they are still begging for food then they are not mentally ready to wean and weaning has occurred too fast. An unwillingness to wean can be a sign of underlying disease or an already over developed human-bird bond and should be assessed by an avian veterinarian.

As a general guide, Budgies usually wean around 7-8 weeks, Cockatiels around 9-10 weeks, Ringnecks and Alexandrines are often 12-14weeks. After formula feeds have stopped it is always good practice to retain your chicks for another 2 weeks or more so they can continue to crèche and socialise in their post weaning

period. This also allows you to monitor their weight and ensure that they are fully weaned before moving to their new homes.

We recommend keeping your companion parrots flighted as it is important for their physical health and mental well-being. Most companion bird owners are requesting flighted birds from breeders as they want to enjoy the natural behaviours of their birds. Unfortunately, some breeders find it easier to trim chicks flight feathers once they are at the point of fledgling to prevent them from flying around the room in case of injury. This also makes it easier to feed a large number of chicks at once. If wing trimming is considered necessary then we recommend it occurs once a chick has learnt how to fly, land and turn in the air. This way if their future owner chooses to keep them flighted they will have already developed these skills. Please see our handout "Procedure for Correct Wing Trim" if you do choose to clip.

Good luck weaning your baby and should you require any assistance during this process please do not hesitate to call.