Psitticine Pediatrics and the Art of Hand-rearing a Normal Parrot

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Minimizing Imprintation

Imprinting begins as soon as the eyes begin to open. Some can make suitable, needy pet companions, but if their requirements are not met, they become easily confused and distraught when major changes are made in their environment or from lack of attention. They often elicit antisocial and problematic behaviors and plucking or self mutilation. We are not here to discuss hand-rearing psitticines to become pets. As aviculturists, we need to produce parent-reared or hand-reared birds who identify with their own species and will raise their own offspring.

Brooder

- Proper temperature
- High humidity levels through feather emergence
- Dim lighting

Function of brooder is to provide an artificial environment for feeding and maintaining chicks after hatch. Artificial brooders are available in tabletop or portable versions. If you elect to HR a parrot, the portable brooder is a more flexible option to meet their feeding schedule demands. Altricial psitticines require humidity and warmth. Too hot temps can cause dehydration or stunting. Too cold can lead to GI stasis. A sponge within a bowl of water is an excellent way of maintaining a higher humidity level until the chick is mobile. Hatchlings are placed into a round bowl and either maintained together as clutchmates or into individual containers for ID purposes. Chicks can still hear, and eventually, see each other. Dim lighting is more comfortable for cavity nesters.

Well-fed amazon nestling in front of a portable brooder.

Near-fledging lories in a tabletop brooder.

Various stages of setups. Macaw nestlings are maintained in the trash bins.

Substrate

- Paper towel
- Shavings
- Towels

Avoid:

- Cedar
- Soil
- Peat
- Leaves
- Corn cob

Provide stable footing for the growing chick, but also take possible consumption into consideration. Avoid some substrates due to irritation of the respiratory tract and/or possible Aspergillus spore contamination. Aspen shavings are the cleanest with the least amount of aromatic oils. Corn cob bedding can lead to crop impaction.

Hyacinth nestling in a bowl with a towel for weighing.

Bowls ‘n’ boxes ‘n’ baskets of babies!

Common Medical Problems

- Crop issues
- Aspiration
- Scissor beak
- Regurgitation
- Sinusitis
- Splay-leg
- Tibiotarsal rotation
- Anteroflexed P1/P4 (hind toes bent back onto themselves)
- Constricted toe syndrome
- Diarrhea

Crop stasis caused by improper formula and brooder temps, disease. Over-stretching= crop bra. Crop burn= bad. Aspiration of very small amounts of food into the trachea is common, just as it is in humans. Normally, this inhaled food will be coughed up, just like in people, but large quantities, or small quantities repeatedly introduced, can cause pneumonia, bacterial infections and sometimes death. Diarrhea? Can be difficult to tell because stool consistency can vary throughout the day and days. Urates should always be white.

Formulated Diets

Commercial formulas

- 16-26% protein
- 3-16% fat
- 2-10% fiber

Follow directions on packaging!

No need to waste time making home-made formulas.

Kaytee, Harrison's, Tropican, Zupreem, Pretty Bird…
Thinned formula of 8% solids is fed initially then increased over the course of 7-10 days to 25-30% (Kaytee). Pedialyte is great initially to minimize dehydration risk. Excessively diluted formula causes caloric deprivation, excessively thick delayed GI transit time and dehydration. Both extremes may stunt or delay chick growth. Generally feed 8-12% of BW at each feeding depending on age, but read directions since they vary across brands.
Why suffer through a home-made mix? Commercial diets have come a long way beyond monkey biscuits. Pellets stuck like mortar onto chick beaks. Difficult for the home-made formulas to have the proper nutritional ratios. Parents can rear chicks with chunky food in crops that would cause GI stasis if provided by human.

Hand-feeding Equipment

- Spoons
- Red rubber catheters
- Metal gavage tubes
- Syringes
- Disinfectant
- Probiotic

Spoons are the way to go if you are prone to producing chicks with scissor beaks and like to make a big mess. Metal gavage tubes are rarely used for hand-feeding healthy chicks, but more for medical cases. Syringes are the most common way to feed parrot chicks. Bleach is not an ideal disinfectant as it quickly destroys the rubber stoppers in a syringe. Probiotic such as Bene-bac provides beneficial bacterias. Just like with humans, every individual maintains a different variety of gut flora which may or may not benefit from a probiotic.

Dainty chick being fed with a spoon. Spoon sides are folded up some to act as more of a funnel. Needs cloaca cleaned.

Spoon feeding is in reality a big mess.

Hand-feeding Techniques

- With syringes
- Tube feeding
- Reduction of feeding response
- Frequency
- Feeding at night?

Support head and neck of chick, not beak. Left hand guides wobbly head, while right syringes feed, bobbing with the pumping reflex. Eliciting the feeding response with close off the trachea and open up the esophagus to the crop. Take care not to traumatize developing upper mandible Empty crop once per day. Tube feeding if for the highly experienced and typically for breeders with an abundance of chicks since formula can be fed quickly and cleanly. Reduction of feeding response can occur if experienced feeder feeds quickly or unexperienced feeder feeds slowly. Feeding frequency varies depending on feeder. Some do every 2 hours around the clock, but not as many anymore. It is more important that the chicks clean out completely overnight (12-6) than to get an extra two grams on the weight chart.

Fledging

Typically, the larger the parrot, the longer the weaning and fledging period. Weaning occurs after fledging. Flight enables personality development and expression. Increased muscle development, particularly of the pectorals, decision making processes, and fine-tuning of motor skills. The fledgling obtains a higher level of confidence which leads to independence. Clipping of wings at flapping stage prior to fledging results in a parrot that is highly unlikely to ever learn to fly or at least properly.

Weaning

- Varied colors, shapes, textures, and flavors
- Manipulate
- Losing weight and interest
- Spilling out of formula
- Crying

During weaning, the chicks are preoccupied most of the day practicing flying techniques and interacting with companions and manipulating anything and everything. The remaining formula feeding is later in the day and the last to go. Offer soaked pellet, fresh produce, and other items suitable for the weaning species. Babies cry for food when hungry, but also when they need nurturing. Ensure that your intelligent psitticine receives positive attention from companions and feeders. Preening, talking to, and social activities with other chicks will greatly aid in the development of a well-rounded, independent parrot.

Socializing

- Avoid hand-rearing singletons
- Introduce into a flock or to a companion of the same (preferred) or similar species as soon as possible
- Imprinting occurs from opening of eyes until sexual maturity

Flock socialization helps in the development of confidence, communication, self-security and independence. The juveniles learn how to interact with others and within a stimulating enviornment.

Winged Encounters at DAK primarily uses juvenile macaws.
Allows for flocking, exercise and social skills development until maturity.

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