Negative Effects as a Result of Hand Rearing Parrots
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Abstract
The past 30-40 years, artificial incubating eggs and hand rearing baby parrots has become common practice within aviculture. Hand rearing started as an evil necessity because of management failures but has become a parrot unfriendly commercial endeavour. Because of many negative effects of hand rearing there is reason to support legislation that will prohibit hand rearing.

Key words; Hand rearing, artificial incubating, behaviour problems.

Introduction
About 30 – 40 years ago, breeding parrots in captivity became more and more popular. At that time artificial incubation and hand rearing baby parrots was often necessary because of different reasons. Main reasons were that parents abandoned the eggs or the youngsters, mutilated and not raised their own offspring. It was even stated that it would be possible, through artificial incubation, to raise the almost perfectly behaved bird. Because it was suggested that youngsters learn self mutilation, obnoxious screaming, mate harassment and poor eating habits from the parents (Jordan 1989).

There are different reasons to consider the necessity for hand rearing baby parrots as the result of management failures concerning housing, nutrition and care complemented with a lack of knowledge about natural behaviour of parrots. Most common is still that parents do not want to raise their own youngster when the youngster are not healthy or not viable because of nutritional deficiencies and other stress factors. Improving the general management and becoming more knowledgeable about the needs of parrots diminishes the need for hand rearing. The past 30 years there has been a growing demand for parrots as companion birds. Aviculturists and pet shops started to advertise with tame and unweaned hand reared baby parrots suggesting that it was beneficial to buy an unweaned baby parrot as young as possible to ensure that the parrot will become the perfect tame companion bird. At the same time knowing that hand rearing is labour intensive there is an economic advantage to sell unweaned birds shifting the hand rearing burden to the purchaser. Aviculturists started to experience that artificial incubation or separating the baby’s from the parents using hand feeding techniques created a situation in which the female started to lay eggs more and more often. Hand rearing became part of the practice within the aviculture because the outcome of artificial incubating eggs and hand feeding chicks was a profitable endeavour.

The reason that parent reared baby parrots are not considered tame is because in general aviculturists consider it normal that breeding pairs are not tame. When the breeding birds are tame, the parent reared youngsters learn from the parents that there is no need to consider the caretaker as a reason for fear. (Hooimeijer J., J.M. Pericard 2009, Engebretson M. 2006)

Negative effects of artificial incubation and hand rearing baby parrots.
The past 15 years more and more data has become available showing the negative consequences of separating baby parrots from their parents and selling of unweaned baby parrots. Incubating eggs and hand rearing baby parrots is an amazingly odd development knowing that, as described in other animals including humans, separating youngsters before or during the important first imprinting’s fase, might cause irreversible behavioural problems.

There are indications that some of the behavioural problems can occur after months or even after years especially when the birds become hormonally active. A range of behavioural problems and welfare issues have been recognized in mice, primates, parrots and humans as consequences of separating youngsters from the parents. Social deprivation throughout infancy leads to long lasting behavioural abnormalities and severe social and emotional deficits. Stereotypes, insecure behaviour, phobic behaviour, biting behaviour, feather picking and self mutilating are some of the possible serious consequences of precociously weaning and separating a baby parrot from the parents (Engebretson M. 2006, Garner J.P., Meehan C.L., Mench J.A.2003.).

The consequence of incubating eggs and separating youngsters at a young age is that females are laying eggs more often compared to the natural situation. In the experience of the author it can explain the negative effect on the life expectancy of the females. Laying eggs more and more often is also having a negative effect on the quality of the eggs and the viability of the youngsters. (Hooimeijer J. 1999)
Risks of improper hand rearing are aspiration pneumonia, crop burn, puncture of esophagus or crop, malnutrition and starvation. (Romagnano A 2003)

According to the experience of the author, the end weight of the babies can become 10-15 % lower than the weight of the parents. Studies have shown that hand reared chicks develop more skeletal deformities compared with parent reared chicks (Harcourt-Brown N. 2004).

There are data that show that baby parrots that are separated from the parents are more vulnerable to infectious diseases, because their immune systems are less well developed. One of the reasons described is that neonatal handling is stressful. (Phalen D.N., Wilson VG, Graham DL 1994)

Among other scientific work, part of the references is an Inaugural Dissertation, PhD-study, at the University of Bern in 2004 by Schmid about the influence of the breeding method on the behavior of adult African grey parrots showing the differences in behavioral problems between hand raised parrots and parent raised parrots. This study showed that hand reared African Grey Parrots develop more aggressive and more selective behaviour towards humans compared with parent reared birds. It also showed that chicks that were separated from the parents at an age under 5 weeks developed more stereotypes compared to chicks that were parents raised for a longer time.

Research by Myers all (1998), working with cockatiels (Nymphicus hollandicus) showed that fledging only occurred in pairs where the males were parent reared. Hand reared females produced more infertile eggs and laid eggs outside the nest box more often.

Discussion

In the Netherlands there is legislation, within the Health and Welfare Act for Animals, that prohibits, in different species, separating young animals from their parents/mother during a specific period of time. Young dogs may not be separated from the mother until the age of 7 weeks. For cats it is also 7 weeks, for rabbits it is 4 weeks and for chimpanzees it is 4 years. Because parrots are not mentioned within this act, incubating eggs and hand rearing baby parrots is not illegal in the Netherlands. This contrasts with data that show that recent advancements in the field of neuroanatomy and cognitive ethology confirms that many avian species exhibit complex cognitive and learning abilities (Pepperberg I.M. 1999).

Because of the known negative effects on the welfare of the animals, the Dutch Parrot Foundation is campaigning in the Netherlands to include parrots on the list of animals that may not be hand reared and separated from the parents. Typical examples are Moluccan cockatoos that are mainly hand reared within aviculture showing screaming behaviour, fearful behaviour, biting behaviour, feather picking, feather destructive behaviour and self mutilating as common behaviour problems. When visiting parrot rescue facilities it is painful to see the many Moluccan cockatoos that are donated because of serious behavioural problems. It is even more sad when we realize that we are dealing with an endangered species in Indonesia. There may be medical indications to justify hand rearing baby parrots. When hand rearing is a necessity it is important to take all the measures to prevent the negative consequences of hand rearing by creating circumstances that are as natural as possible. To prevent problems, hand rearing in projects like the Californian Condor project or reintroduction projects of endangered cranes, hand rearing was developed in a way that there was no human-animal relationship during hand rearing, mimicking the natural situations as much as possible. Special condor feeding puppets are used as surrogate parental models the same way surrogate parental models are used in hand rearing cranes within reintroduction projects (Horwich R. H 1989).

Conclusions

Parrots belong to the most charismatic, intelligent and social animals which have a very high life expectancy. It is the responsibility of avian veterinarians and aviculturists to prevent problems and to enhance the welfare of parrots in captivity.

Considering the available data and based on the current experience there is every reason to conclude that hand rearing of baby parrots is not in the best interest of the health and welfare of parrots. Baby parrots should have the legal right to be raised by their parents at least until they reach an age at which the birds are no longer dependant on their parents concerning their nutritional needs.

It is not in the best interest of the females to be manipulated and forced to have more clutches because of commercial interests of the breeder.
References, recommended reading

13. Harcourt-Brown N. 2004 Development of the skeleton and feathers of dusky parrots (Pionus fuscus) in relation to their behaviour. The Veterinary Record 154: 42-48


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