Poicephalus Studbook Data Compared to a 12-year Feeding Trial Using an Organic Formulated Diet

ERIC A.W. VAN KOOTEN, BSc

Since 1985, parakeets and parrots have been successfully bred at our breeding facility. Although various kinds have been bred, the first breeding of *Poicephalus rueppellii* can be indicated as a highlight. This success has been realized by a dramatic change in the management of the nursery during the early 90s.

The basis of this change was the improvement of the well being of the parrots. Major changes were realized as far as accommodations, feed and purchase and sales policies. In addition to the changes in management, it was decided to use an avian veterinarian specializing in birds as a consultant for our breeding station. The results of these changes, of which the use of a specific feed is the main factor, will be described in this paper in comparison to the results realized by the members of the *Poicephalus* Studbook of The Netherlands.

The *Poicephalus* Studbook of The Netherlands has been founded by the author of this paper together with some other enthusiastic breeders of the *Poicephalus*. With 125 participants and more than 1150 registered birds, it is one of the largest parrot studbooks in the world. The complete list of birds and its administration were registered in a special administrative program called Zooeasy. Next to the standard control of individual bird data, the breeding administration is kept in here as well. By the University of Wageningen, a specific calculation concerning inbreeding has been developed that has been integrated in the software program applied by the studbook organization. To be able to execute additional statistical analyses, the PSN organization has developed its own software program (Studbook Management Information System - SMIS), which generates, for example, the data for the yearly-published Master Studbook. The specific software mentioned above enables the comparison of data gathered by the author and those of the PSN.

GENERAL CONSIDERATIONS

Unfortunately, my experiences are not performed by a professional research institute and therefore lack a scientific basis. An experimental and scientific model to investigate the results of using pellet-feed was difficult to realize as well.

To investigate possible breeding differences as a result of a breeding station having twelve years of experience in using HBF and a group of *Poicephalus* parrots represented by the database of the PSN, breeding data of 9 years of PSN and a total of 12 years' experience using HBF was compared. Here a remark has to be made as we only can speak of real consistent data since 1999. This particularly applies to the data of the PSN.

Various Comparisons

In the statistical study, comparisons have been made between the outcome of our private breeding station and the PSN. The comparisons included the number of:

- eggs produced
- eggs fertilized
- eggs per breeding cycle
- hatchlings from these eggs
- birds that have "flown out"

From all comparisons it can be concluded that in all cases the results of the private breeding station are dramatically better than those of the PSN.

Comparison of Price /Investments Needed in Feed

It is obvious that the main objective of the breeder definitely will be the number of birds that will fly out, can be sold or used for internal breeding programs. Before being able to make a price comparison, the number of birds that have flown out has been considered. The graph presented shows the number of young birds per pair over a period of years.

From the graph can be learned that the number of youngsters per year as a result of the private breeding station shows to be considerably larger than the result of an average

pair presented by the PSN.

The pairs in the private breeding station show 3,37 (SD 0,61) birds as an average over a period of 9 years against 0,91 young birds (SD 0,56) for the PSN. In case we correct the figures for the consistency of the data produced during the early days of the database, the following information can be given:

- For the Private breeding station 3.17 young bird (SD 0.61) per pair
- For the PSN 1.45 young birds (SD 0.16) per pair.

The main objective of the above mentioned information is to come to a well-founded financial basis for the use of HBF. The starting point is a pair of *Poicephalus rueppellii* for which the feeding data are known. The comparison is made on the basis of the daily feed allowance whereby all feed-supplements, as available in both databases, have been ignored. In this comparison only the prices for the HBF feed including additional supplements as Power Treat and Juvenile powder, are considered next to the High Potency pellets.

To come to a calculation of the conventional way of feeding the daily quantities of seed, egg concentrate, extra vitamins and minerals, specimen are taken into consideration. As a quantity of feed, approximately 80 g of seed per day per year and approximately 24 g High Potency Coarse pellets per day per year are used.

Pair of ruppells per day		
	Conventional	**Pellet (HBF)**
Price per day	€ 0,10	€ 0,32
Supplements per day	€ 0,06	€ 0,04
Total per day	€ 0,16	€ 0,36
Total per year	€ 58,40	€ 131,40
Difference	€ 73,00	
Mean youngsters	1,45	3,17
Price per young	€ 400,00	€ 400,00
Total per year	€ 580,00	€ 1.268,00
Profit per year	€ 521,60	€ 1.136,60
Difference	€ 615,00	

In addition to this simple calculation other elements can be taken into account which all are extra features once HBF is used:

- The birds will need fewer veterinary check-ups
- Young birds become independent faster
- Fewer dead parent birds due to breeding problems
- As a result a smaller need for new birds and therefore a smaller chance to introduce infectious diseases into the existing population.

CONCLUSION

To check whether the use of the HBF methodology against the conventional feeding method of mixture of seed completed with various supplements proves to be beneficial, a comparison is made between the data of the author's breeding station and the data of the *Poicephalus* Studbook of the Netherlands. Given the fact that the consistency of the historical data (early 1990s) can be questioned, the data available from 1999 definitely can be used as a basis for conclusions on HBF-usage in comparison to conventional feeding methods.

The data of the PSN might be influenced by the fact that some members of the studbook organisation in the meantime switched to pellets as main or supplementary feeding method for their birds. The results presented in this paper have not been corrected for this.

The conclusion is justified that the use of HBF is definitely worth the extra costs when compared to the use of traditional feed. Next to the benefits mentioned previously, such as a larger number of young birds, fewer dead birds, healthier birds, faster independence of young birds and fewer ill birds, other aspects have not been mentioned. Among others, the most important are that we experienced a major improvement in behavior since the introduction of HBF as well as a remarkable change in color of the feathers.

No doubt, the introduction of HBF is one of the elements that has improved the well-being of our parrots in addition to the other actions we initiated in the early 1990s to realize a more sensible captivity of these beautiful animals.