

## Inbreeding Fact of Exotic Wild Psittacids in Bangladesh

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### Research Article

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### Abstract

Captive breeding of short-tailed parrots (4) and long-tailed parakeets (16) out of 20 species were remarkable. These colourful birds were very nice in common appearance. Casual cages were used for their breeding especially for smaller birds. Parrots and parakeets are mainly reared as hobby and due to remarkable production and public acceptance only budgies are commercially abundant in Bangladesh. Parrot, Parakeet, mutated form of Ring-necked Parakeet, Lorikeet, Lovebird, Budgie, Conure, Rosella, Amazon Parrot, Cockatiel, and Cockatoo are common in all pet shop. In aviary, Budgie rearing is common then Lovebird, Cockatiel, and Macaw. Psittacids breeding accessories and its care are more complicated and vary from species to species. In breeding season most of the birds are shown aggressiveness to their pair and human too. Colourful feather, huge variety, nice voice, activeness and for talking ability these birds are excellent pet. Mortality rate of parrots and parakeets were found high. This study was performed in the year 2019.

**Keywords:** Captive Breeding; Parrot; Parakeet; Psittacidae

### Introduction

Psittacid is a group which included Parrot, Cockatoo, and New Zealand Parrot. Most parrots are viable candidate in captivity. Parrots were first common birds to be traded by European tribal people [1]. Parrots are kept as companion birds to fulfill social, emotional and cognitive needs of human [2,3]. There are three families of the parrots worldwide are psittacoidea (parrot), cacatuoidea (cockatoo) and strigopoidea (New Zealand parrot). Like other birds parrots are monogamous and there is a strong bond between male and female [4]. Research said that these birds have been domesticated later and no real evolutionary aspects in birds study [5,6]. In USA this is in number fourth positioned popular bird after fishes, cats, and dogs [7] and in Norway this is fifth after fishes, cats, dogs, and rabbits. In all wild birds 20%

parrots are affected for trading [8-10]. Using chemicals for growing crops, poaching, and habitat loss in some places the population of Macaw is decreasing [11]. 90% mortality rates were found in parrots for capturing and transporting. Yellow-crested Cockatoo (*Cacatua sulphurea*) is declined over 80% in nature [12]. Survival and successful natural breeding do not signify to the well-being of parrot family [13-15]. Feather picking and plucking in parrots family is similar to human compulsive and impulsive disorder such as hair pulling and hand washing [16]. Result suggested that in most people they have less experience (87%) on parrots' biology [17]. For breeding purpose the parakeets are good than other parrots. Not only in parrots but also all animals are very excited in their breeding season. All cage birds need six fundamentals for its proper existence - feed, environment, treatments, relatives, mental peace and if any new birds

need to introduce in your places maintain 30 days quarantine (Animal Welfare Council, UK). The longevity of Macaw is near about 50 years and its sexes are same differ only that female is smaller than the male [18]. A study was completed on sixteen cage birds of Bangladesh with six parrots and parakeets at Dhaka Katabon Market, Bangladesh [19]. Very neglected diseases were found in this parrot family. The objective of this study is to observe the breeding status of exotic wild psittacids in Bangladesh.

## Materials and Methods

**Rearing cages:** Large sized Blue and Gold Macaw needs 30'x60'x20' measured aviary for a single pair breeding. Nest boxes are placed at the same height due to avoid its fighting. Human 'Cerelac' (baby food item) and biscuit is common feed with other items for them.

**Sexing of birds:** Feather DNA is used for the sex identification of the parrots and this system is reliable [20]. In Bangladesh, this DNA technique is not available. Sometimes close observation of birds indicate sexes but it needs long time experiences. Hens appear more alertness, inspecting possible nesting sites and will take excess calcium for its correct egg shell formation. The volume of faeces of female will be higher in breeding season. Lack of nesting material and bad feed generates the breeding problems. Budgerigar is a social bird among other psittacids so it needs to see another colony or pair at its corner clearly.

**Collection of birds:** For proper outcome need to take patience maximum 1 year and 4-5 year in case of larger breeds (Plates 1-20) [18].

**Rearing problems:** At old age lack of calcium egg bound syndrome is common in parrot family. In addition, cold season is related with this problem because excess moisture is affected on muscle and calcium deficiency. Always pair your birds at the same age for improving next generations [18].

**Helping sources:** Identification of the observed birds species was completed by Ali [21]; Bologna [22]; IUCN [23-25]; Whitfield [26].

## Results

African Gray Parrot is shown higher price and this is rare bird at all. Only after ordering the shop keepers collect this bird. Greater Sulphur-crested Cockatoo is nice for taming and talking. Macaw is very large in size and expensive and not easily handled. For its proper breeding need adequate knowledge. Cockatiel and Budgerigar are very common birds' item with reasonable price. As Alexandrine Parakeet and Red-breasted Parakeet are our native bird so these are not available in our market. In parrot family, their clutch size is normally higher than other cage birds. The highest clutch size (4-6) was found in Budgerigar. Lorikeet and Macaw lays fewer eggs (2-3) than the other observed birds. Incubation of Budgie was shown only 18 days whereas this was 25-30 days for Great Sulphur-crested Cockatoo. Lowest fledging were recorded in Bourke's Parakeet (28 days) and higher in Greater Sulphur-crested Cockatoo (60-100 days) and Blue and Gold Macaw (90 days) (Table 1).

English Name	Scientific Name	Origin	Clutch Size	Incubation (days)	Fledging (days)
Peach-faced Lovebird	<i>Agapornis roseicollis</i> (Vieillot, 1818)	Africa	4-5	23	42
White-crowned Parrot	<i>Pionus senilis</i> (Spix, 1824)	Mexico and Central America	3-5	24-26	49
African Gray Parrot	<i>Psittacus erithacus</i> L. 1758	Africa	3-4	29	80
Roseate Cockatoo	<i>Eolophus roseicapilla</i> (Vieillot, 1817)	Indonesia and New Guinea	2-5	25	49
Greater Sulphur-crested Cockatoo	<i>Cacatua galerita galerita</i> Latham, 1790	Australia	2-3	25-30	60-100
Green-cheeked Conure	<i>Pyrrhura molinae</i> Massena & Souance, 1854	South America	4-6	24	52
Sun Conure	<i>Aratinga solstitialis</i> (L. 1758)	America	3-4	26	50
Budgerigar	<i>Melopsittacus undulatus</i> (Shaw, 1805)	Australia	4-6	18	35
Cockatiel	<i>Nymphicus hollandicus</i> (Kerr, 1792)	Australia	5-6	19	35
Crimson Rosella	<i>Platycercus elegans</i> Gmelin, 1788	Australia	5-7	26	35
Golden-mantled Rosella	<i>P. eximius</i> (Shaw, 1792)	Australia	5-7	26	35
Alexandrine Parakeet	<i>Psittacula eupatria</i> (L. 1766)	India	2-3	28	49

Rose-ringed Parakeet (yellow/primrose form)	<i>P. krameri</i> (Scopoli, 1769)	India	3-4	23	50
Rose-ringed Parakeet (blue form)	<i>P. krameri</i>	India	3-4	23	50
Red-breasted Parakeet	<i>P. alexandri</i> (L. 1758)	Asia	3-4	23	50
Bourke's Parakeet	<i>Neophema bourkii</i> (Gould, 1841)	Australia	4-5	19	28
Blue Bonnet Parakeet	<i>Northiella haematogaster</i> (Gould, 1838)	Australia	4-5	21	37
Gouldie's Lorikeet	<i>Psittuteles goldie</i> (Sharpe, 1882)	New Guinea	2	24	60
Rainbow Lorikeet	<i>T. haematodus</i> (L. 1771)	Australia	2	26	60
Blue and Gold Macaw	<i>Ara ararauna</i> (L. 1758)	America	2-3	28	90

**Table 1:** Breeding fact of psittacids in Bangladesh.

## Discussion

Budgerigar can utter more than 500 words during pet. In order to collect the birds for rearing then breeding suitable age is 6-9 weeks. Most popular budgies are red-eyed lutinos, snow white albinos, and rich violet. Gray parrots are same as budgie for chattering about 500 words if tame. Normally small breeds are less disruptive. Chicks of gray parrot are independent at the age of 16 weeks. Tame Cockatoo is very destructive bird and it utter only 30 words. Cockatoos take unfamiliar foods like fresh fruits and green stuff. For cockatiel it is good for breeding of a pair in a single cage; this bird is more social. Genus *Neophema* is very similar to Cockatiel. Lovebirds carry nesting material in their bill when breeding season comes. In parrot family conures are in two genera - *Pyrrhura* and *Aratinga*. Though both are cousin in relation but *Pyrrhura* is less disruptive than *Aratinga*. It needs nest box throughout the year. In Amazon parrots there are 30 species all over the world. This bird is more destructive and needs 16 gauge mesh size of wire of the cages [20]. Budgies are not required artificial heating or lighting. Gray parrots bear a great bad habit as pet of feather plucking. During the breeding season the male cockatoo acts as killer to female and its behavior may worsen as they grow older. It has no instinctive fear to people. There are some colour variations in Cockatiel; pied is its first mutated form [27]. Its nature is social so it is easily reared with finches, quails, doves, and soft bills. Cockatiels can live well into their teens. In world, the lovebirds have 9 different species. Most time in Sun Conure both yellow and orange coloured chicks are found in the same nest. It is good whistler but it has feather plucking habit. In Lorikeet group there is a great exception in its feeding habit. It takes nectar and pollen of the flower. Ring-necks parakeet group have 14 species. Nicobar Parakeet (*Psittacula caniceps*), Layard's Parakeet (*P. calthorpeae*) are unknown birds in captivity and the Mauritius/Echo Parakeet (*P. echo*) is the rarest parrots in the world. In African type *P. krameri krameri* is highly prized by

Romans and the Indian type is *P. k. manillensis*. The tip of upper mandible of African type is black whereas in Indian this is bright red. Ring-necks have no strong pairing bond. Normally young male does not mate with older female. Lutino and blue mutation was found in Indian type and between two the blue variety is more popular. Combined these breeds pure white albinos with red-eyed were produced. Orange-breasted Parakeet *P. alexandri* is not popular as pet for its noisy behavior. All parrots are normally purebred because they are not mix with other breeds [28]. In 2009 by Sarker and Abdullah [19] noticed 33 birds out of 43 wildlife trade in Dhaka Katabon Animal Market, Bangladesh. Cockatiel has six colour patterns [27]. In third world country it is very common to sell wild birds in open market [29]. Illegal trading and endangered wildlife are sold with the exotic birds [30]. Due to unethical and non-scientific rearing of cage birds especially parrots and parakeets are going to extinct [28]. Not only pet but also sometimes cage birds are collected for food, ornamentation, and medicine purpose [31]. An alarming study by Sarker [32] is that last hundred years in our country 18 species of wildlife including birds will be extinct.

## Conclusions

Budgerigar can be a commercial bird in Bangladesh. Its reproductive capability is pronounced. In any short space or in a balcony some pairs are enough for the primary rearing. Recently, Cockatoo is becoming popular for its nice voice and breeding too. Lovebirds are nice but its number is not remarkable. In breeding season special care should apply on female cockatoo for the adverse activities of their males. Rose-ringed Parakeet is our native bird so it is not permitted to rear them in cage. Due to strong wildlife act now people are very conscious; they only rear exotic birds in cage. But the mutated form of this Parakeet is accepted to rear in cage. Its blue and yellow coloured variety is very popular in Bangladesh. Parrots are not mixed with other breeds. So their purity is

mentionable in other birds. In Dhaka Katabon Animal Markets of Bangladesh are selling lots of exotic domestic or pet animals with psittacids. In those shops most of the birds are parakeets and parrots then pigeons and doves. These birds are running item for all sorts of people especially youngsters. In Bangladesh, selling of local wild birds is rare now. Ethical and scientific rearing of cage birds especially parrots and parakeets are going well in Bangladesh. Now we have regained wildlife in our nature for the adequate supply/production or rear the exotic wild or domestic birds.

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