Rock-Pigeons in Some Parts of Bangladesh

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Abstract: Out of 492 rock pigeons the highest percentage were shown in blue bar (74.59) then blue checker (10.77). Other types are pied (5.89), black (2.64), white (2.24) and mealy bar (1.22). In Sylhet Shah Jalal Majar though there lot of pigeons but for mixing with other breeds especially tumbler and domestic breeds now this pure breeds are facing its purity and found only 57 pure rock pigeons. In Kushtia town (observed pigeons 150) in some old building and roadside wooden chambers which are provided by pigeon lovers are keeping this pigeons. Poradaha town and its Railway Station observed total pigeons were 97 and these pigeons take water adjacent from a pond. Some illegal and hawker of the platform captured the squab of rock-pigeon and take as meat in Ishwardi railway station (total pigeons 188). Highest pigeons, male and female were found in Ishwardi and lowest in Sylhet of Bangladesh. Observed adult rock pigeons there were some juveniles but those were not counted in sex ratio. All pigeons take food on the platform and when public gathers they go outside. With the wild rock pigeons, some domestic and tumbler breeds are mixed and living well for a long time. In Sylhet this study was performed on 27 December 2014, in Kushtia 29 May, Poradaha 30 May and Ishwardi 31 May in the year 2015.

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1. Introduction:

Wild rock pigeons are found in most of the world except Antarctica. Except Bangladesh other countries there is a huge large colony of wild rock pigeons. In Bangladesh in some ancient cities, railway station, hilly areas and with domestic pigeons its number is not bad. In Fancy pigeons, all variety carry blue color with two black bars on the wing. These pigeons are the origin of all fancy pigeons (Darwin, 1859). On the road, roadside it takes food as grains, seeds, and insects.

Most people put basket here and there especially the top of the house so it passed its breeding life smoothly. Its breeding season is April and May. Due to unhygienic condition (Kabir, 2014a) and excess hot or for less food its number is decreasing day by day. Over taking as food and urbanization, its number is facing problems. From the blue rock pigeons now by selective breeding there are 300 varieties of pigeons are found all over the world. The unhygienic condition is the main causes of disease spreading (Kabir, 2014a). Feral pigeons Columba Livia are the most successful avian colonies of the cities and characterized by wide variation in plumage (Leiss & Haag-Wackernagel, 1999a).

Feral pigeons are derived from domesticated dovecote pigeon, lost homing and fancy styles (Haag-Wackernagel, 1998). Rock pigeons are killed by predator birds and human hunters and starvation through seasonal variation (Peterson & Williamson, 1949; Hewson, 1967; Goodwin, 1976). In most European cities feral pigeons are caught by public for the meat which allows weak and handicapped birds to survive (Haag-Wackernagel, 1995, 1998).

In the urban area for hard winter the mortality rate of rock pigeons are absent (Peterson & Williamson, 1949). Plumage characteristics of rock pigeons are wild type or blue bar with lower frequencies of checker (Solomonsen, 1935; Peterson & Williamson, 1949). In last few thousand years human have produced huge color variations in pigeons which are absent in wild stock (Haag-Wackernagel, 1998). Variations in plumage polymorphism in feral variations from their domestic ancestry (Go, 1972; Johnston & Janiga, 1995; Leiss & Haag-Wackernagel, 1999a).

There are 60 hereditary factors are found in feral pigeons (Gibson, 1995). Within this 23 were found in Vienna feral populations (Leiss & Haag-Wackernagel, 1999b). There are four primary patterns in rock pigeons- barred, barless, checker and T-pattern (Haag-Wackernagel et al., 2006). Plumage morphs are dependent on behavioral and physiological states (Murton et al., 1973; Leiss &

Haag-Wackernagel, 1999a). Fledging feral pigeons are roosting shelters with threating city life such as traffic, transmission lines, disease, cats and dogs (Johnston & Janiga, 1995).

Newly fledged pigeons show the highest mortality between 31-90 days of age (Nohlgren & Wagner, 1977) and time between fledging and settlement in a feeding flock in crucial (Johnston & Janiga, 1995). Juvenile birds are reddish leg and adults their dark grey orbital skins (Johnston & Janiga, 1995; Kautz & Malecki, 1990). Due to melanin formation in town environment in most European variety are a blue bar (Janiga, 1991).

Checkers have selective disadvantages than the blue bar (Peterson & Williamson, 1949). Murton and Clarke (1968) and Murton (1970) speculated that continuous breeding in the blue bar its chicks contains less fat which is cause for death in poor feeding. In feral pigeons, huge melanic plumages are common in large town and fewer blue bar in small town (Johnston & Janiga, 1995).

The history of pigeons in Bangladesh is not clear. Its raising was a hobby in Dhaka inherited from Mughal since the 16th century. However, some are an opinion that when Saint Shah Jalal left Delhi and arrived in Sylhet in 1303, Hazrat Nizamuddin Auliya gave him two pairs of black pigeons. As such these pigeons are referred to as Jalali pigeon. Kushtia bears the sign of rich cultural heritage of the region from the Mughal period. However, during the British rule, Kushtia was not a separate district – it was a part of the Nadia district (now in West Bengal). Poradaha also bears the sign of our route of some renowned people to India. However, during the liberation war, this station has remarked an important railway station of Bangladesh. From here different towns are connected to some other important areas. Ishwardi railway station was established in 1878 from Calcutta to Siliguri. 185 km journey along the eastern Bengal state railway from Calcutta station (later renamed Sealdah) to Damookdeah Ghat on the southern bank of the Padma River.

2. Materials and Methods:

2.1. Sylhet Shah Jalal Majar:

In Sylhet Shah Jalal Majar there huge wild rock pigeon but some domestic and tumbler pigeons there mixed variety formed. There a little pure wild rock pigeon. Peoples are served paddy and wheat as its food. Due to mismanagement, there pox, twisted neck and eye problems were found. Only tumbler and domestic variety which normally not found on land and live upper part of the building and they are mostly fine (Table 1-2; Diagram 1-2).

2.2. Kushtia Town:

Four places of Kushtia where in three some pigeon lovers have made a wooden chamber for better living of this pigeon. In the morning this pigeon takes food on the road which is not fresh and hygienic. Water taking reservoir is not adequate. People don't know that many pigeons are lost for searching the water. It needs water pot near its dwell place. An ancient building in Kushtia town near Baro Bazar there some wild rock pigeons is living well. But food and water source is a problem there. The death rate by heat in pigeons is very common in Kushtia (Table 1-2; Diagram 1-2).

2.3. Poradaha Town and its Railway Station:

Near the Poradaha railway station there some rock pigeons are available. In this area there some rice mill is located. The pigeons are getting huge food for a living. Huge food and basket are useful for its proper breeding. In Poradaha Railway Station the number of pigeons is adequate. Moreover, near the station, there is a pond which is very essential for that pigeons (Table 1-2; Diagram 1-2).

2.4. Ishwardi Railway Station and Locoshed:

This railway station is biggest one in other railway stations. It adjacent areas there is a loco shed where thousands of thousands wild rock pigeons are lived once a time. Now some pigeons are locally migrated from loco shed to the railway station. Due to protection acts, huge food, good management in loco shed its number is mentionable (Table 1-2; Diagram 1-2).

2.5. Observe the rock pigeon and its types:

Blue colored with two black bars on the wing this is blue barred pigeons. When this black bar or band is scattered is called checker which seems black spots mainly on the wing as Chinese spotted dove. When these black spots are overlapping in the whole body looks black and white and black scattered or partially is pied. Sometimes the blue bar is replaced by brown color is a mealy or brown bar and checker. Brown is replaced by red and when there are no pigments they showed white (Table 1-2; Diagram 1-2).

3. Results:

Table 1: *Rock pigeons in four places*

Type of rock-pigeon	Sylhet Shah Jalal Majar (♂,♀)	Kushtia town (♂,♀)	Poradaha town and its Railway Station (♂,♀)	Ishwardi Railway Station and its Locoshed (♂,♀)
Blue Rock-Pigeon (C. l. Livia)	3 (1, 2)	-	-	-
Indian Blue Rock-Pigeon (C. l. intermedia)	29 (8, 21)	119 (25, 94)	77 (20, 57)	139 (33, 106)
Blue Checker	5 (1, 4)	12 (5, 7)	11 (6, 5)	25 (13, 12)
Mealy Bar	2 (1, 1)	3(1, 2)	-	1 (1, 0)
Mealy Checker	-	1 (1, 0)	-	-
Brown Bar	-	-	1 (0, 1)	1 (0, 1)
Brown Checker	-	-	1 (0, 1)	1 (1, 0)
Self-Red	2 (0, 2)	3 (1, 2)	-	3 (0, 3)
Pied	6 (3, 3)	8 (0, 8)	4 (2, 2)	11 (4, 7)
Black	7 (5, 2)	-	2 (0, 2)	4 (3, 1)
White	3 (3, 0)	4 (0, 4)	1 (0, 1)	3 (0, 3)
Total (♂,♀)	57 (22, 35)	150 (33, 117)	97 (28, 69)	188 (55, 133)
Ratio (♂:♀)	1:1.59	1:3.55	1:2.46	1:2.42

Table 2. Percentage of different types of rock pigeons

Types	Total	Percentage
Blue Bar (C. l. Livia and C. l. intermedia)	367	74.59
Blue Checker	53	10.77
Pied	29	5.89
Black	13	2.64
White	11	2.24
Self-Red	8	1.63
Mealy Bar	6	1.22
Brown Bar	2	0.41
Brown Checker	2	0.41
Mealy Checker	1	0.20

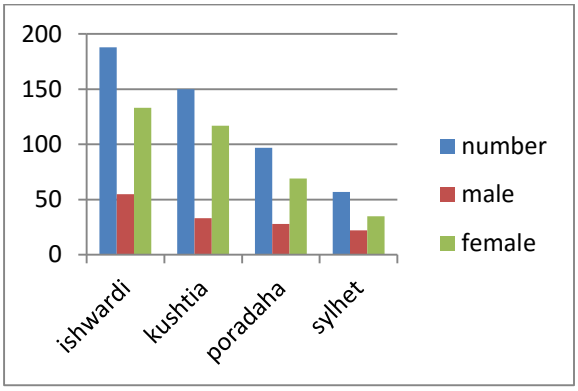

Diagram 1. Showing the availability of rock pigeons on its number with male and female

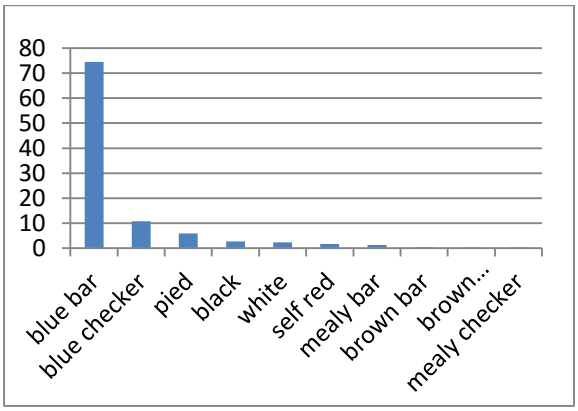

Diagram 2. Showing the percentages of different type of rock pigeons

4. Discussion:

A study on 7682 feral populations where 1135 (14.8%) were juvenile, 6547 (85.2%) adult, 29.9% blue bar and 27.5% blue checker (Haag-Wackernagel et al 2006). Wild pigeons carry Salmonella as well. Newcastle disease is very closely related to the twisted neck (torticollis). There are about 30 types of diseases are found in pigeons (Weber 1979). The waste product of pigeons carries more Aspergillus fungus and there 2% Salmonella bacterium (Muller 1965).

A study shows that older pigeons are the carrier of Trichomonas gallinae. The environment of pigeons' rearing is very suitable in Asia as well as Bangladesh (Kabir 2014b). Some resident birds are caught during nesting season so that those can't lay safely eggs (Kabir 2012). Within the wild rock population sometimes when it goes to the field and mix with domestic variety then tumbler and Columba Livia domestic comes with this pigeon and stay in the station. In Ishwardi Railway Station I found a blue bar rock pigeon squab with crest but its parents were both

wild type head. Due to living under tin-shed in hot season heat stroke, eye disease, and pox are very common diseases of this pigeon. Cleanliness by the worker is good but for this some pigeons are getting frightened so they escape from this shelter. As the railway stations are more or less protected so pigeons are not poor in number.

5. Conclusion:

Rock pigeon is the ancestor and origin of all fancy pigeons. In protected areas as well as railway station is good for living of wild rock pigeon. Due to government railway station their some rules and regulations now pigeons are more or less preserved in such a way. Due to excess heat of tin in summer season pox, heat stroke and eye problems are very common and for this pigeons are decreasing in little.

In Sylhet due to little knowledge of rock pigeons, some people release domestic or tumbler pigeons. So that crossed between and among them now this rock pigeon is facing the stability of its own gene and genotype frequency. Immediately need to take some attempts for preserving this original pigeon.

In Bangladesh most of the rock-pigeons are Indian Blue Rock-Pigeon- Columba Livia intermedia, this is totally blue in color with two black bars on wing, long-necked and rump is dull blue. Whereas the Blue Rock-Pigeons differs only white rump. After the duties of the worker some illegal or hawkers are caught the squab for meat. In Poradaha station, there some baskets are hanged for its proper breeding.

In Ishwardi Railway Station there only one tumbler male pigeons and domestic (one crested and one leucite) pigeons were found with this rock pigeon population. Nest of Common Myna (Acridotherus tristis) and House Swift (Apus affinis) were found in Poradaha and Ishwardi with these rock pigeons. There were no conflicts among birds for living different areas. We need to protect this rock pigeons by providing the strong implementation of wildlife act, especially in railway station areas.

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Appendix

Plate 1. Sylhet Shah Jalal Majar

Plate 2. Kushtia town

Plate 3. Poradaha Railway Station

Plate 4. Ishwardi Railway Station and Locoshed