

# **Population Ecology and Habitat Preference of Lesser Adjutant in North-East Region in Bangladesh**

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## **1.0 BACKGROUND**

### **1.1 Rationale or Project Justification**

Bangladesh is a small country having an area of 147,570 sq. km with a population of about 165 million. Among the various other fauna and flora there are 388 species of resident birds and 263 species of migratory birds live in this country. This is undoubtedly an extraordinary situation that such a great diversity of birds still exists in an unusually overpopulated country with a very limited range of habitats. However, population of birds decreasing day by day mainly due to loss of nestling habitat, lack of food and unkind behavior of humans. Nineteen species of birds already have become locally extinct from this country and 39 species of birds are regionally threatened (Critically Endangered- 10, Endangered- 12 and Vulnerable- 17; IUCN 2015). The Lesser Adjutant was previously considered Endangered by IUCN Bangladesh, 2000 and later it was categorized threatened (Vulnerable) bird in Bangladesh (IUCN Bangladesh, 2015) and it is also a globally vulnerable species (IUCN 2016). Stuart Baker found 15 colony of lesser adjutant in greater Sylhet (covering what is now north-east Bangladesh and part of Assam) in 1885 (Baker, 1929). Presently there are no breeding sites of Lesser Adjutant in Bangladesh except one colony which has been breed in a village singhari in horipur of Thakurgaon district close to Indian state West Bengal of west dinajpur district since 2000. There was at least one nesting pair in Dhaka, Faridpur, Noakhali, Khulna and Chittagong Hill Tracts up to 1982. The pairs of lesser adjutant in whykong in Teknaf and char bata in Noakhali were extirpated because of shrimp cultivations in those areas in the 1980s (Khan, 1987). Lesser Adjutant was considered “fairly common”, by Hussain in undated (Z. Hussain 1993), with “up to 25 seen on all visits to outer edge of the Sundarbans in recent years” (P. M. Thompson in litt. 1999) Although There are no breeding colony of lesser adjutant in whole sylhet division in Bangladesh now but recent investigation in juri sub-district of Moulvibzar found that up to the year of 2000 there was one breeding record in the forest edge of patharia reserve forest in a very old garjan tree which was cut down after an auction in 2000 and since then there has been no breeding record in that area. Very recently a very small population of lesser adjutant has been found in different places in juri upazila under Moulvibazar district and these birds also inhabit patharkandi in karimganj district of Assam, India. They stay in the day time in tea gardens and other open areas for several months in Bangladesh. The main aims of this project were to know the present population and habitat preferences of Lesser Adjutant in the north-east region of Bangladesh. The data and information of the project will ultimately help for conservation of the species in the area.

### **1.2 Introduction:**

Lesser Adjutant (*Leptoptilos javanicus*) is listed as globally vulnerable because the small population is thought to be declining quickly throughout its range due to several factors including the felling of nestling trees, drainage and conversion of wetlands feeding habitats, intensification of agriculture, use of pesticides and more anthropocentric disturbance (BirdLife

International 2012). The global population of lesser adjutant remain only 6500 to 8000 and out of those 2000 individual are found in the Indian states of Assam, Bihar and West Bengal, 2000 individuals in Indonesia, 2500 – 4000 individuals in Cambodia, 300 individuals in Nepal and 500 individuals is found in Sri Lanka, Bangladesh, Myanmar, Laos and Malaysia (BirdLife International 2012). Patharia is a reserve forest covering about 120 square kilometres where Bangladesh has 80 square kilometres where Indian state in Assam has 40 square kilometres. The study area is close to the edge of the trans-boundary forest Patharia reserve forest. Patharia is a brilliant forest in terms of biodiversity. The forest beat lathitila has a record of Bengal Tiger in 2006 (Khan, 2008) which is the only sighting of tiger in recent years in north-east Bangladesh and the forest has also sightings of foot prints of Leopard inside the forest stream. A company commander of Border Security Force of India R.K Yadav, mentioned that he along with his other junior officers sighted several times leopard in the adjacent villages of Patharia in India. There are six Asian Elephant (very recently one elephant was died in India) in patharia reserve forest all of which are female (Chowdhury, 1999). The forest earlier had records of breeding of Lesser Adjutant with at least three confirmed breeding records. Earlier very old garjan trees of this forest were the nestling habitats of Lesser Adjutant.

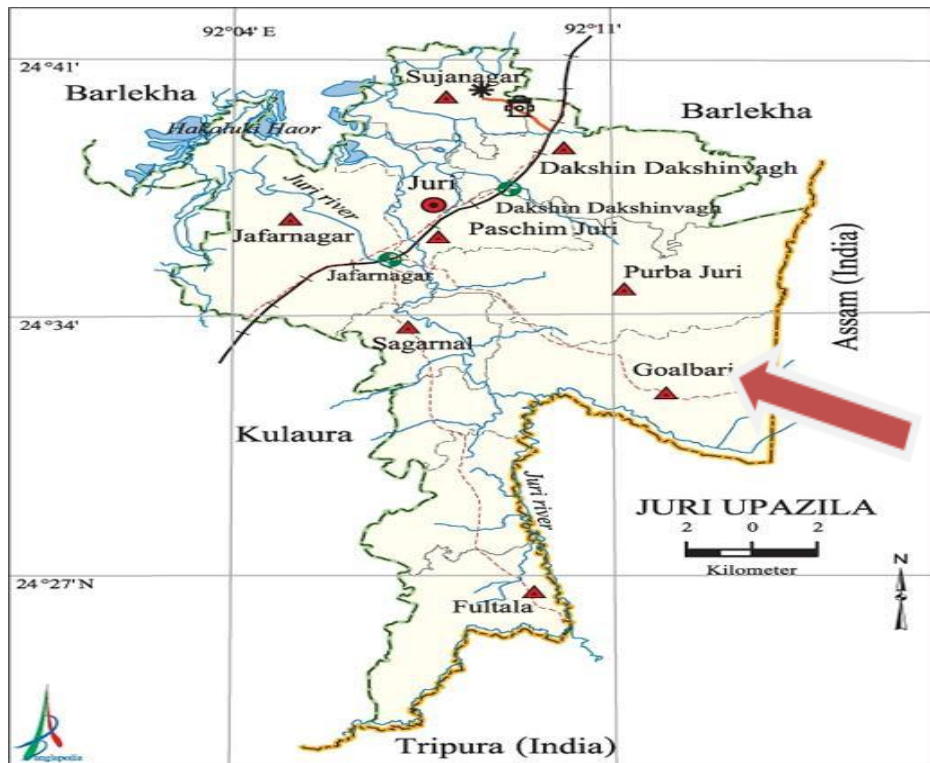
### 1.3 Project Objectives

1. Population survey of Lesser Adjutant in juri upazila, Moulvibazar
2. Find out where it makes nest
3. Find out where it feeds, where it takes rest at night and day time
4. Find out its habitat preference in Bangladesh
5. Find out threats of the bird in the area

### 2.0 Study Areas

The study area comprises of the hills and valleys of tea gardens, consisting of tea plants, small to medium shedded trees and villages of tea labourers surrounding the tea gardens (which have some fruit and timber trees). The shedded trees are becoming fewer day by day due to unwise cutting of tall trees. The valleys normally consist of marshy paddy fields.

The study area includes four tea gardens Sonaropa garden, Dhamai tea garden, Ratna tea garden, Silloah tea garden and also several villages including dumabari, lathitila, south lathitila, mid lathitila. All of the areas is under juri upazila of Moulvibazar district situated in the north-eastern end of Bangladesh very close to Assam of India. Most of the people of the area are tea labors and a few are of other professions.

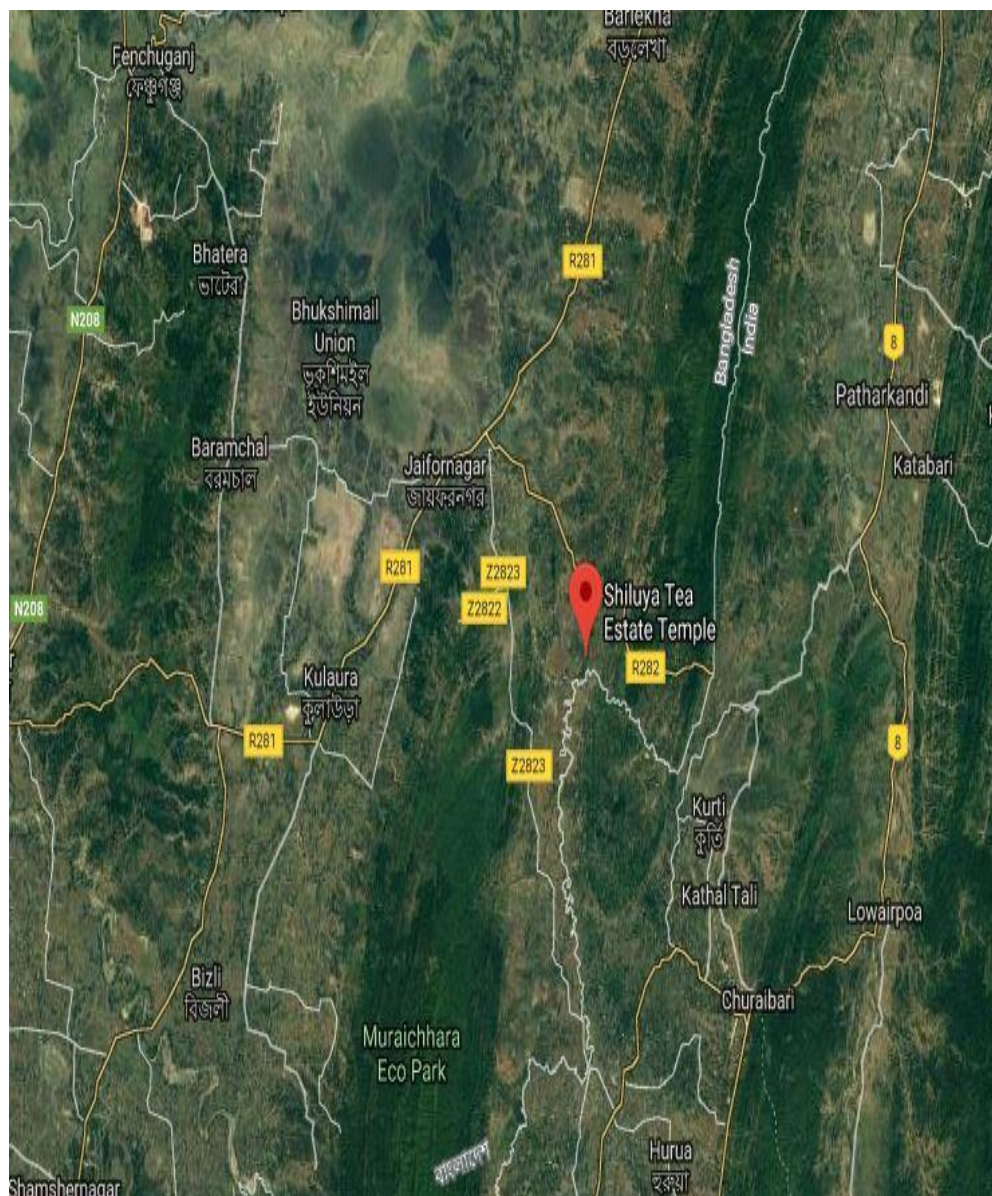


Map of the study areas

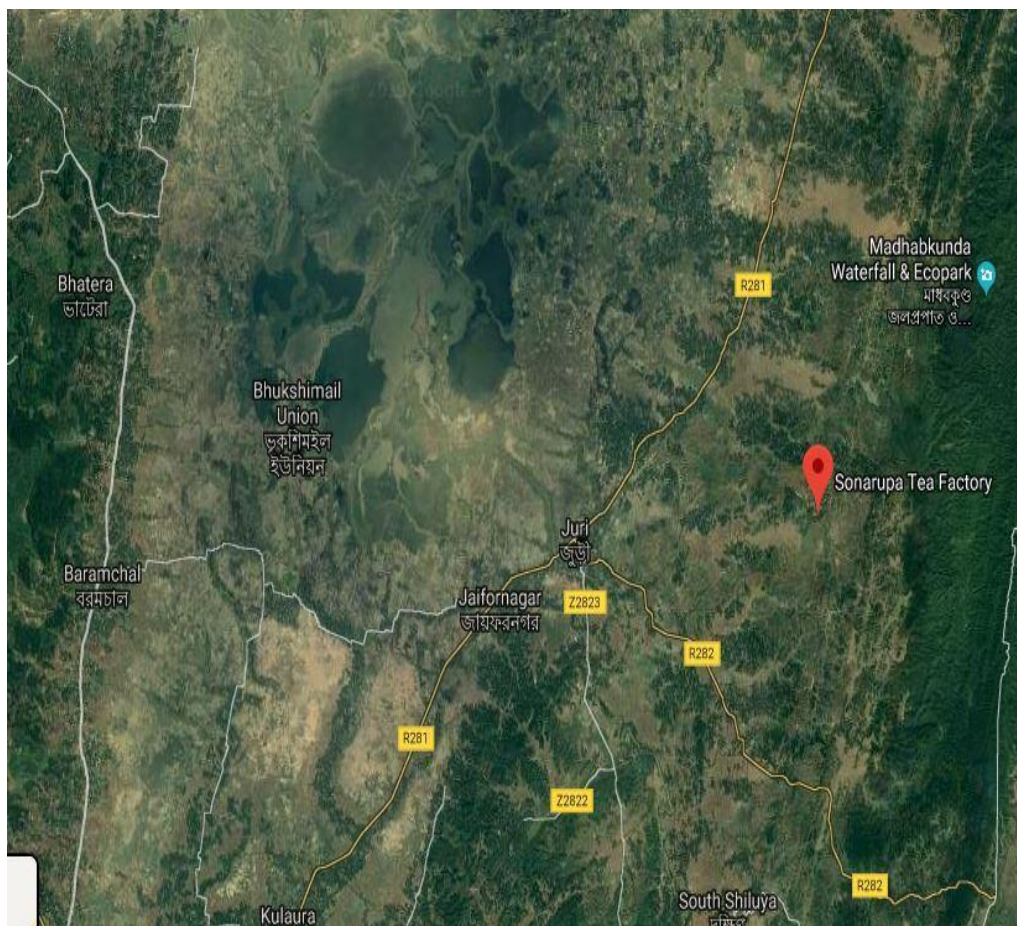


Patharia Reserve Forest





Silloah tea garden



Sona rupa tea garden



**Sona rupa tea garden:** Sona rupa tea garden is a very well known tea garden in juri sub-district of Moulvibazar. Sona rupa tea garden has some large fallow lands and valleys between neighbouring tea gardens where Lesser Adjutant forages.

**Silloah:** Silloah is an old tea garden with an area of 1200 acres which was established in 1890 and all of the tea workers came from the Indian state of Bihar. Silloah tea garden has a border outpost or bop camp of Border Guard Bangladesh. The foraging ground of silloah is a fallow shallow water body where Lesser Adjutant forages. Silloah tea garden is around 12 kilometres from lathitila.

**Dumabari:** Most of the land here was owned by a man named Duma although he sold his land in 1923- 1924. The village is situated just on the border of Assam and Patharia reserve forest starts from this village.

There are several border pillars in Dumabari like 1397 main pillar, 1397 1S, 1397 2S, 1397 3S, 1397 4S, 1397 5S, 1398 main pillar, 1398 1S, 1398 2S, 1398 3S, 1398 4S, 1398 5S, 1399 main pillar, 1398 1 S, 1398 2S, 1398 3S, 1398 4S, 1398 5S and 1400 main pillar. There is also a neighbouring village named Dumabari in patharkandi of India and to the south of Dumabari village is Lathitila.

**Lathitila:** Lathitila is a village close to the border with Assam. Long ago some local people quarrelled with sticks (locally called *lathi*) in the evenings for several months near a hillock (locally called *tila*) forest which is part of dilkusha tea garden which gave this village its name. Lathitila has a fallow low depth water body where Lesser Adjutant forages for feeding. There is a tea garden named dilkusha tea garden in Lathitila. Because of land disputes between India and Bangladesh there was no border fence here until and very recently this dispute has been solved and a wire fence has been set up in the remaining parts of the area.

**Kuchai:** Kuchai is a division of silloah tea estate and this division has several adjacent villages like north kuchai, pechartol and north kuchai.

**Nalapunji and kalabeel:** Kalabeel is a village adjacent to Indian state Assam and Tripura broder. The place is an open area with shallow water body. There is a trans-boundary river name thal is flowing in this area.

**Kochurgul:** Kochurgul is a village which is behind of dilkusha tea garden and has borders of north Tripura district of Indian state Tripura. The river thal is also flowing in this area.

### 3.0 Methodologies

For population assessment we documented three important variables: how many places lesser adjutant was sighted, how many days' birds were sighted and how many individual adjutants were sighted along with those places and days.

Lesser Adjutanthas been surveyed in the study areas in two consecutive years in 2018 and 2019. The duration was from March 2018 to August 2019 by me along with 13 enumerators. Most of the enumerator's houses are close to the field where they can easily see lesser adjutant when they just came out from their house. Data was collected in tea gardens and other habitats through direct observations by me and local peoples interview was taken for information on their population, their past sightings and present sightings in their surrounding places since they are very close to the habitat of lesser adjutant and were aware of historical breeding in the Patharia reserve forest.

Data of direct observation for feeding on the ground and resting on trees has been collected in scanning methods. In total 16 days were spent observing feeding ecology and resting habits.

In addition a field visit was done from 5<sup>th</sup> August to 10<sup>th</sup> August in 2019 in the opposite side of our study areas which are on the patharkandi in karimganj district of India to know the population status of lesser adjutant there.

## 4.0 Results

### **Observations**

#### **Objective 1:**

Population status of Lesser Adjutant in juri upazila of Moulvi bazaar district

#### **Observation 1:**

Several local people in patharkandi, karimganj India were asked about the occurrence of lesser adjutant. Most of the respondents said that the lesser adjutant has become rarer now compared to fifteen to twenty years ago. They also added that they do not see more than 2 – 3 lesser adjutants at a time. However very few people like Premnath in dumabari said they he saw around five or six individuals together in mohongul in patharkandi of Karimganj district.

**Table 1: Number of Lesser Adjutant in different places in 2019**

<b>Name of the place</b>	<b>Number of days 1 individual of Lesser Adjutant seen</b>	<b>Number of days 2 individual of Lesser Adjutant seen</b>	<b>Number of days 3 individual of Lesser Adjutant seen</b>	<b>Number of days 4 individual of Lesser Adjutant seen</b>	<b>Number of days 5 individual of Lesser Adjutant seen</b>
Dumabari and Champatila	15 days	6 days		1 days	
Lathitila	30 days	35 days	1 day		2 days

Mid and South lathitila	6 days	9 days			
Nalapunji And kalabeel		2 days	1 day		
Silloah	27 days	4 days			
Sona rupa tea garden	3 days	2 days			
North kuchaitol and pechartol					
Kuchai	8 days				
Noyabazar eidgah	9 days				
West kochurgoal	9 days				
Kochurgul	8 days	2 days			

**Table 2: Number of Lesser Adjutant in different places in 2018**

Name of the place	Number of days one Lesser Adjutan	Number of days 2 individua l of Lesser	Number of days 3 individua l of Lesser	Number of days 3 individua l of Lesser	Number of days 4 individua l of Lesser	Number of days 5 individua l of Lesser	Number of days 6 individua l of Lesser
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	<b>t was seen</b>	<b>Adjutant seen</b>	<b>Adjutant seen</b>	<b>Adjutant seen</b>	<b>Adjutant seen</b>	<b>Adjutant seen</b>	<b>Adjutant seen</b>
Dumabari and Champatila	29 days	17 days	3 days	1 day		2 days	2 days
Lathitila	34 days	6 days	2 days				
Mid and south lathitila	9 days	11 days					
Nalapunji and kalabeel	9 days	4 days					
Silloah	36 days	9 days	1 day	-	-	-	-
Sona rupa tea garden	7 days	1 day	1 day				
North kuchaitol and pechartol	1 day	2 days					
Boruli	8 days						
Noyabazar eidgah	8 days						
Dilkusha		4 days					
Kochurgul	6 days						

Magura	9 days	1 day					
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### **Maximum count of Lesser Adjutant**

There were 6 individual of Lesser Adjutant seen together perching an awal tree in dumabari in two consecutive days in 2018 and 5 individual of lesser adjutant were seen for two days in lathitila in 2019 and one day 4 individual was seen in dumabari in 2019.

### **Number of days and number of lesser adjutant seen in different sites in 2018 and 2019**

#### **Observation 1:**

Dumabari in 2018: Lesser adjutant sighted 52 days in front of different border pillar 1999-1S, 1397-3S, 1399-3S, 1397-4S, 1397-5S, 1399-1S, 1396-7S in Bangladesh side. Out of those 52 days 5 individual was seen for 2 days and 6 individual of lesser adjutant were seen for 2 days.

#### **Observation 2:**

Dumabari in 2019: 21 days so far has been sighted up to August 2019 and maximum 4 individual was sighted for 2 days.

#### **Observation 3:**

Lathitila in 2018: Adjutant was sighted 43 days in front of a broken iron bridge in the village of lathitila in 2018.

#### **Observation 4:**

Lathitila in 2019: Lesser adjutant sighted 69 days in front of the broken iron bridge in lathitila in 2019. It was sighted 2 individual of adjutant for 45 days, 3 individual was sighted for 4 days and 5 individual of adjutant was sighted for 2 days.

#### **Observation 5:**

Silloah in 2018: Lesser adjutant dropped 47 days beside silloah high school and beside silloah BGB camp. One individual was seen for 37 days and 2 individual was seen for 9 days and 3 individual was seen only for one day.

**Observation 6:**

Silloah in 2019: there were 31 days lesser adjutant was recorded to drop beside silloah BGB camp and beside silloah high school in 2019.

**Observation 7:**

Boruli in 2018: There were 8 days one individual of lesser adjutant was recorded in boruli in 2018.

**Observation 8:**

Boruli in 2019: One individual of lesser adjutant was sighted for 7 days in boruli in 2019.

**Observation 9:**

Nalapunji and kalabeel in 2018: It was 13 days lesser adjutant was recorded in nalapunji and kalabeel in 2018. Out of those 13 days one adjutant was seen for 9 days and 2 individual was seen for 4 days.

**Observation 10:**

Nalapunji and kalabeel in 2019: Adjutant was sighted only for 3 days in nalapunji and kalabeel and 2 individual was seen for 2 days and 3 individual was seen only for one day.

**Observation 11:**

Eidgah, noya bazar in 2018: One adjutant was sighted for 7 days in front of eidgah in noyabazar in 2018.

**Observation 12:**

Eidgah, noya bazar in 2019: One adjutant was sighted for 4 days in front of eidgah in noyabazar in 2019.

**Observation 13:**

Kuchai in 2019: One adjutant was seen for 6 days in kuchai tea garden in 2019.

**Observation 14:**

Kochurgul in 2019: 2 lesser adjutants was seen for 2 days and 1 individual of adjutant was seen for 8 days in kochurgul in 2019.

**Observation 15:**

Kochurgul in 2018: 1 lesser adjutant was sighted for 7 days in kochurgul in 2018.

**Observation 16:**

North kuchaitol and pechartol in 2018: 2 individual of adjutant was sighted for 2 days and one individual was recorded in one day in north kuchaitol and pechartol in 2018.

**Observation 17:**

West kochurgul in 2019: One adjutant was seen for 9 days in west kochurgul in 2019.

**Observation 18:**

Magura in 2018: One adjutant was seen for 10 days in magura with 2 to 7 individual of open bill stork.



**Observation 19:**

South lathitila and mid lathitila in 2018: Total 20 days was sighted and out of 20 days sightings of adjutant 1 individual was seen for 11 days and 2 individual of adjutant was sighted for 9 days.

**Observation 20:**

South lathitila and mid lathitila in 2019: 2 individual was seen for 9 days and 1 individual of adjutant was seen for 6 days.

**Observation 21:****Population estimate of Lesser Adjutant in the study area:**

Dumabari, champatila, lathitila, south and mid lathitila these four villages in addition to Nalapunji and kalabeel are situated on the border area and our local enumerator Kamal ahmed and khurshid alom found several times 6 individual of lesser adjutant to night roost in 2016 to 2019. In addition, Indian part dengabond, a place just opposite of Bangladesh nalapunji and kalabeel we have found four individual of adjutant together soaring on a shallow water body in August 2019.

So it is considered that there are above mentioned six villages has at least 6 individual adjutants in those areas.

Silloah, kochurgul and Magura several times 2 individual of adjutant seen and these areas are around 12 kilometres away from lathitila that's why those individuals is considered different from lathitila and its adjacent villages.

Pechartol, kuchaitol and north kuchaitol are around 6 kilometre away from silloah, kochurgul and magura and we also considered those 2 individual of adjutant is different from silloah or

kochurgul and Boruli is also very far away and it is different position compare to other areas which are previously mentioned so one individual of boruli is added to previous individuals.

All of the aforementioned areas are in goalbari union (several villages are together called union) but Fultola is situated in sagarnal union with the border of Indian state Tripura and some local people has been confirmed that one or two individual of adjutant usually seen on the field during the season of rice cultivation.

**Table 3: Population estimate of Lesser Adjutant in the study area**

<b>Serial no.</b>	<b>Places</b>	<b>Possible number of lesser adjutant</b>
1.	Dumabari, champatila, lathitila, south and mid lathitila	4
2.	Nalapunji and kalabeel	2
3.	Silloah, kochurgul, magura	2
4.	Pechartol, kuchaitol, north kuchaitol	2
5.	Boruli, noyabazar	1
6.	Sonarupa	1
7.	Fultola	1
<b>Total</b>		<b>13</b>



## **Objective 2: Find out where it makes nest**

No recent record of breeding of lesser adjutant was found in juri upazila in Moulvibazar district. There are three confirmed previous records of breeding of Lesser Adjutant in lathitila beat of patharia reserve forest was found from a worker of forest department named Montu mia. Two nesting trees of garjan *Dipterocarpus bourdillonii*, locally called airong, were cut down in two different auctions by forest department of Bangladesh: one in the year 1980 and the other in the year 2000. The nesting reports given by local people are detailed below.

The nesting tree was cut down in 1980 was in a place named lamba jura in lathi chara. This garjan tree had a reported base girth (trunk circumference) of 25 – 30 feet. There were reported to have been around 70-80 nests of Lesser Adjutant in that tree.

The nesting tree in komol chara was cut down in the year 2000 also a garjan tree and was reported to have held around 30- 40 nests of lesser adjutant. The young of lesser adjutant dispersed when the tree was cut down and some local people took some chicks to their homes according to Montu Mia, a forest worker of Bangladesh Forest Department. Nrendra Das, a friend of Montu Mia said that people couldn't go close to the nesting trees of lesser adjutant because of odour of the droppings.

The third past breeding record was found reported to be around 10 – 12 pairs of Lesser Adjutant nesting in a place named hatir doal in some very old garjan trees inside dilkusha tea garden during 1977-1978. The nesting trees were also around (trunk circumference) of 25 – 30 feet.



**Breeding in patharkandi, karimganj, Assam and north tripua in Tripura:** Possibly there is no breeding place in patharia reserve forest in the Indian part since the Patharia forest in India is very much less to Bangladesh.

Around fifteen people was asked about the breeding site of Lesser Adjutant in lathitila, dumabari, champabari, dengabond, churaibari, rani bari tea garden, satsongom in India but one old man confirmed that he have seen nest of lesser adjutant in several trees in churaibari in Tripura border of south Assam.

### **Objectives 3: Find out where it feeds, where it takes rest at night and day time**

#### **Observation 24:**

**Feeding places of Lesser Adjutant:** There are 24 feeding places of lesser adjutant were found in goalbari union of juri sub-district so far. The feeding places are followings north kuchaitol, kuchai, kuchaitol, pechartol, silloah BDR camp, silloah high school, eraligul, magura, lathitila, south lathitila, mid lathitila, nalapunji, kalabeel, dumabari, champatila, boruli, doho para, hal gora, sona rupa tea garden, dilkusha, kochur goal, west Kochurguland noya bazaar eidgah.

#### **Resting trees of lesser adjutant**

#### **Observation 25:**

The adjutant preferable tree species are toirol, awal, cotton, rain tree and bon supari in the study areas.

## **Night roosting by Lesser Adjutant in 2018**

### **Observation 26:**

Lathitila: Lesser Adjutant roost night for 46 days in a toirol tree beside a iron bridge in lathitila in 2018 and out of 46 days, 2 individual of adjutant was roost at night for 16 days and 3 individual of adjutant roost night for 4 days.

Silloah: One lesser adjutant roost night in a Artocarpus chama tree beside BGB camp in silloah for 6 consecutive days.

Dumabari: 3 individual of lesser adjutant roost night only for 1 day in a awal tree.

## **Night roosting by Lesser Adjutant in 2019**

### **Observation 27:**

Lathitila: lesser Adjutant remain 44 days for night roosting on the toirol tree in lathitila and out of those days 15 days roost 2 individual of adjutant, 4 days roost 3 individual and rest 25 days one adjutant roost night on that same tree.

**Table 4: Feeding places of Lesser Adjutant in the study area**

<b>Serial no.</b>	<b>Name of the Place</b>	<b>Number of days spent for feeding in 2019</b>	<b>Number of days spent for feeding in 2018</b>	<b>Habitat type</b>	<b>GPS Co-ordinate</b>
1.	Pechar tol	-	2 days	Tea Garden	24°31'37" N and 92°10'51" E
2.	Kuchai	3 days	-	No man's land in Bangladesh part	24°31'52" N and 92°11'2" E
3.	Silloah	27 days	28 days	Agricultural land	24°31'53" N and 92°10'7" E
4.	Eraligul			Agricultural land	24°32'39" N and 92°9'53" E
6.	Lathitila	42 days	31 days	Agricultural land and no men's land	
7.	South lathitila and mid lathi tila	13 days	11 days	Agricultural land and no men's land	24°31'13" N and 92°13'529"
9.	Champatila, dumabari	5 days	17 days	Agricultural land and no men's land	24°32'46" N and 92°13'52" E

11.	Nalapunji and kalabeel	3 days	11 days	Agricultural land and no men's land	24°30'46" N and 92°13'6" E
13.	Sona rupa tea garden (22 no. block)	3 days	5 days	Tea garden and large field	24°35'40" N and 92°10'35" E
16.	Boruli	-	6 days	Tea garden and large field	24°34'35" N and 92°8'5" E
17.	Eidgah, noyabazar	3 days	6 days	Tea garden and large field	24°34'42" N and 92°8'57" E
18.	Dilkusha	-	3 days	Tea garden and large field	
19.	Kochurgul	10 days	4 days		
20.	Magura	-	8 days		
21.	West kochurgul	9 days	-		

**Table 5: Resting Trees of Lesser Adjutant in the study area**

<b>Serial no.</b>	<b>Name of the Place</b>	<b>Tree</b>	<b>Habitat type of the area</b>	<b>GPS Co-ordinate</b>
1.	Pechar tol	Sirish	Tea Garden	24°31'37" N and 92°10'54" E
2.	Duma bari	Toirol	No man's land in Bangladesh part	24°31'51" N and 92°13'51" E
3.	Siloah	Bohera	Agricultural land with low water field	24°31'53" N and 92°10'5" E
4.	Silloah high school	Rain tree	Agricultural land	24°32'9" N and 92°9'37" E
5.	Silloah	Bohera	Agricultural land	24°31'51" N and 92°10'15" E
6.	Champatila	Cotton	Forest edge and no man's land	24°32'42" N and 92°13'54" E

7.	Lathitila	Toirol	No man's land in Bangladesh part	
8.	Mid lathitila	Cotton	No man's land in Bangladesh part	24°31'17" N and 92°13'31" E
9.	Boruli	Chikrasi	A village far away from border area	24°34'22" N and 92°34'9" E
10.	Boruli	Cotton	A village far away from border area	24°34'39" N and 92°34'18" E

**Table 6: Night roosting by Lesser Adjutant in 2018**

<b>Date</b>	<b>Place</b>	<b>No. of Lesser Adjutant</b>	<b>Tree Species</b>	<b>Remarks</b>
10/03/18	Lathitila	1	<i>Toirol</i> tree	
12/03/18	Lathitila	1	<i>Toirol</i> tree	
13/03/18	Lathitila	1	<i>Toirol</i> tree	
20/03/18	Lathitila	2	<i>Toirol</i> tree	
22/03/18	Lathitila	1	<i>Toirol</i> tree	
24/03/18	Lathitila	2	<i>Toirol</i> tree	
25/03/18	Lathitila	1	<i>Toirol</i> tree	
27/03/18	Lathitila	2	<i>Toirol</i> tree	
30/03/18	Lathitila	1	<i>Toirol</i> tree	
04/04/18	Lathitila	3	<i>Toirol</i> tree	
07/04/18	Lathitila	1	<i>Toirol</i> tree	
09/04/18	Lathitila	1	<i>Toirol</i> tree	
11/04/18	Lathitila	2	<i>Toirol</i> tree	
13/04/18	Lathitila	2	<i>Toirol</i> tree	
14/04/18	Lathitila	1	<i>Toirol</i> tree	

16/04/18	Lathitila	1	<i>Toirol</i> tree	
18/04/18	Lathitila	1	<i>Toirol</i> tree	
20/04/18	Lathitila	1	<i>Toirol</i> tree	
23/04/18	Lathitila	2	<i>Toirol</i> tree	
25/04/18	Lathitila	3	<i>Toirol</i> tree	
27/04/18	Lathitila	1	<i>Toirol</i> tree	
28/04/18	Lathitila	2	<i>Toirol</i> tree	
29/04/18	Lathitila	1	<i>Toirol</i> tree	
10/05/18	Lathitila	2	<i>Toirol</i> tree	
11/05/18	Lathitila	1	<i>Toirol</i> tree	
13/05/18	Lathitila	1	<i>Toirol</i> tree	
14/05/18	Lathitila	1	<i>Toirol</i> tree	
15/05/18	Lathitila	1	<i>Toirol</i> tree	
17/05/18	Lathitila	1	<i>Toirol</i> tree	
19/05/18	Lathitila	1	<i>Toirol</i> tree	
21/05/18	in lathitila	2	<i>Toirol</i> tree	
23/05/18	Lathitila	2	<i>Toirol</i> tree	
05/06/18	Lathitila	2	<i>Toirol</i> tree	
07/06/18	Lathitila	2	<i>Toirol</i> tree	



07/06/18	Beside Silloah border guard Bangladesh camp	1	<i>Artocarpus chama</i>	Six consecutive day's night roosting in puja hill.
08/06/18	Beside Silloah border guard Bangladesh camp	1	<i>Artocarpus chama</i>	Second day night roosting in puja hill
09/06/18	Beside Silloah border guard Bangladesh camp	1	<i>Artocarpus chama</i>	Third day night roosting in puja hill.
10/06/18	Beside Silloah border guard Bangladesh camp	1	<i>Artocarpus chama</i>	Fourth day night roosting in puja hill.
11/06/18	Beside Silloah border guard Bangladesh camp	1	<i>Artocarpus chama</i>	Fifth day night roosting in puja hill.
12/06/18	Beside Silloah border guard Bangladesh camp	1	<i>Artocarpus chama</i>	Sixth day night roosting in puja hill.
09/06/18	Lathitila	1	<i>Toirol tree</i>	
13/06/18	Lathitila	2	<i>Toirol tree</i>	
14/06/18	Lathitila	3	<i>Toirol tree</i>	
15/06/18	Lathitila	3	<i>Toirol tree</i>	
17/06/18	Lathitila	1	<i>Toirol tree</i>	
18/06/18	Lathitila	1	<i>Toirol tree</i>	
19/06/18	Lathitila	2	<i>Toirol tree</i>	
20/06/18	Lathitila	2	<i>Toirol tree</i>	
22/06/18	Lathitila	1	<i>Toirol tree</i>	
23/06/18	Lathitila	1	<i>Toirol tree</i>	
24/06/18	Lathitila	2	<i>Toirol tree</i>	
01/07/18	Near BGB camp	1	Koroi	Night roost in the adjacent hill



**Table 7: Night roosting by Lesser Adjutant in 2019**

<b>Date</b>	<b>Place</b>	<b>No. of Lesser Adjutant</b>	<b>Tree Species</b>	<b>Remarks</b>
19/01/19	Lathitila	1	<i>Toirol</i>	
20/01/19	Lathitila	2	<i>Toirol</i>	
22/01/19	Lathitila	1	<i>Toirol</i>	
24/01/19	Lathitila	1	<i>Toirol</i>	
25/01/19	Lathitila	3	<i>Toirol</i>	
27/01/19	Lathitila	3	<i>Toirol</i>	
03/02/19	Lathitila	2	<i>Toirol</i>	
04/02/19	Lathitila	2	<i>Toirol</i>	
06/02/19	Lathitila	1	<i>Toirol</i>	
07/02/19	Lathitila	1	<i>Toirol</i>	
09/02/19	Lathitila	1	<i>Toirol</i>	
11/02/19	Lathitila	3	<i>Toirol</i>	
13/02/19	Lathitila	2	<i>Toirol</i>	
15/02/19	Lathitila	2	<i>Toirol</i>	
18/02/19	Lathitila	1	<i>Toirol</i>	

20/02/19	Lathitila	2	<i>Toirol</i>	
23/02/19	Lathitila	1	<i>Toirol</i>	
24/02/19	Lathitila	1	<i>Toirol</i>	
28/02/19	Lathitila	2	<i>Toirol</i>	
01/03/19	Lathitila	1	<i>Toirol</i>	
03/03/19	Lathitila	1	<i>Toirol</i>	
04/03/19	Lathitila	2	<i>Toirol</i>	
06/03/19	Lathitila	1	<i>Toirol</i>	
09/03/19	Lathitila	1	<i>Toirol</i>	
13/03/19	Lathitila	2	<i>Toirol</i>	
14/03/19	Lathitila	1	<i>Toirol</i>	
16/03/19	Lathitila	1	<i>Toirol</i>	
17/03/19	Lathitila	1	<i>Toirol</i>	
21/03/19	Lathitila	1	<i>Toirol</i>	
23/03/19	Lathitila	1	<i>Toirol</i>	
24/03/19	Lathitila	2	<i>Toirol</i>	
25/03/19	Lathitila	1	<i>Toirol</i>	
27/03/19	Lathitila	1	<i>Toirol</i>	
30/03/19	Lathitila	1	<i>Toirol</i>	

03/04/19	Lathitila	1	<i>Toirol</i>	
03/04/19	Lathitila	2	<i>Toirol</i>	
06/04/19	Lathitila	1	<i>Toirol</i>	
07/04/19	Lathitila	2	<i>Toirol</i>	
09/04/19	Lathitila	2	<i>Toirol</i>	
11/04/19	Lathitila	1	<i>Toirol</i>	
13/04/19	Lathitila	1	<i>Toirol</i>	
15/04/19	Lathitila	3	<i>Toirol</i>	
17/04/19	Lathitila	2	<i>Toirol</i>	
19/04/19	Lathitila	2	<i>Toirol</i>	

#### Objective 4: Find out its habitat preference in Bangladesh

**Table 8: Habitat preference of Lesser Adjutant in different places in 2019**

Serial no.	Name of the place	Type of the habitat	Number of days Lesser Adjutant were survey	Number of days staying in the given place	Average no. of Lesser Adjutant seen (Total no. of adjutant seen/ Total no. of days seen)	Highest no. of Lesser Adjutant seen in this year
1	Dumabari and champatila	Fallow marshy land in no man's land in Bangladesh part		22 days	$31/22 = 1.41$	7
2	Lathitila	Fallow marshy land in no man's land in		69 days	$118/69 = 1.71$	7

		Bangladesh part				
3	Mid and south lathitila	Fallow marshy land in no man's land in Bangladesh part		15 days	$24/15 = 1.6$	2
4	Nalapunji and kalabeel	Fallow marshy land in no man's land in Bangladesh part		3 days	$7/3 = 2.33$	2
5	Silloah tea garden	Tea garden and marshy fallow land		31 days	$35/31 = 1.13$	3
6	Sona rupa tea garden	Tea garden and marshy fallow land		5 days	$7/5 = 1.4$	2
7	North kuchaitol and pechartol	Tea garden and marshy fallow land		3 days	$3/3 = 1$	2

8	Boruli	Marshy land beside a local road		7 days	$7/7 = 1$	1
9	Kuchai	A village far away from border area		8 days	$8/8 = 1$	2
10	Noyabazar eidgah	A village far away from border area		4 days	$9/9 = 1$	1
11	West kochurgoal	A village far away from border area		9 days	$9/9 = 1$	1
12	Kochurgul	A village far away from border area		10 days	$12/9 =$ 1.33	2



**Table 9: Habitat preference of lesser adjutant's in different places in 2018**

<b>Name of the place</b>	<b>Habitat type</b>	<b>Number of days Lesser Adjutant were survey</b>	<b>Number of days staying in the given place</b>	<b>Average no. of Lesser Adjutant seen (Total no. of adjutant seen/No. of days seen)</b>	<b>Highest no. of Lesser Adjutant seen</b>
Sona rupa tea garden	Tea garden	3 months	9 days	$12/9 = 1.33$	2
Dumabari and champatila	Fallow marshy land in no man's land in Bangladesh part	12 months	48 days	$98/52 = 1.88$	7
Lathitila	Fallow marshy land in no man's land in	12 months	43 days	$53/43 = 1.23$	7

	Bangladesh part				
South and mid lathitila	Fallow marshy land in no man's land in Bangladesh part	3 months	20 days	$31/20 =$ 1.55	3
Nalapunji and kalabeel	Fallow marshy land in no man's land in Bangladesh part	3 months	13 days	$17/13 =$ 1.31	2
North kuchaitol and pechartol	Marshy land far away border area	3 months	3 days	$5/3 =$ 1.66	2
Boruli	Marshy land beside a local road	3 months	8 days	$8/8 = 1$	1
Silloah tea garden	Tea garden and marshy fallow land	12 months	45 days	$57/45 =$ 1.26	2
Magura	Tea garden and marshy fallow land	3 months	10 days	$11/10 =$ 1.1	1

Dilkusha tea garden	Tea garden and marshy fallow land	3 months	4 days	$8/4 = 2$	2
Kochurgul	A village far away from border area	3 months	7 days	$6/6 = 1$	2
Noyabazar eidgah	A village far away from border area	3 months	7 days	$7/7 = 1$	1

**Table 10: Summary of habitat preference by Lesser Adjutant in 2018 and 2019**

<b>Places</b>	<b>Habitat type</b>	<b>Number of days adjutant seen in 2018</b>	<b>Number of days adjutant seen in 2019</b>
Dumabari and champatila, Lathitila, Mid and south lathitila, Nalapunji and kalabeel, Kochurgul	Fallow land in no man's land in Bangladesh part	133 days	109 days
Silloah tea garden, Sona rupa tea garden, Dilkusha tea garden	Fallow land between valleys of the tea gardens	59 days	36 days
North kuchaitol and pechartol, Boruli, Kuchai, Noyabazar eidgah, West kochurgoal, Magura	Agricultural land far away from border area	35 days	41 days

## **Objective 5: Find out threats of the bird in the area**

### **Observation 28:**

It is only found in the wetland areas of the country but recently seldom seen even in the wetlands of various parts of the country. The causes behind the decrease of its population might be as follows:

- Destruction of due to cut down very old *airong* tree inside the lathitila beat of juri range of Patharia reserve forest which are the which are the nestling trees of Lesser Adjutant
- Conversion of feeding habitat to agricultural land in the fallow land beside the forest edge in the no men's land and also on the tea garden valley in Bangladesh part
- 
- Lack of awareness on how to conserve Lesser Adjutant

Realizing the situation, it is of great importance to ensure the conservation of the remaining small population of Lesser Adjutant. However, if the present project is awarded the bird/s population along with Lesser Adjutant in the area of intervention will certainly increase.



## 5.0 Conclusions and Recommendations

Earlier there was no studies has been done about the occurrence of Lesser Adjutant in our study area but in our recent study shows that Lesser Adjutant is mostly occurred in every part of the north-east areas where the border line of Indian state Assam and also some part of Tripura exists. This study we also found their habitat preference and also diet component of Lesser Adjutant. We need to check out for the other adjacent areas especially in the biyani bazar, sub-district of sylhet and barlekha, sub-district of moulvi bazaar is needed about the occurrence of Lesser Adjutant specially in the biyani bazar, sub-district of sylhet and barlekha, sub-district of moulvi bazaar because we have already get information about the occurrence while we questions those areas. There are still some mature and very old airing or garzan trees in lathi chara and firon nala of lathi tila beat of Patharia reserve forest. These trees should be saved with the help of Bamngladesh Forest Department as the future nestling trees of Lesser Adjutant. There are 10 awareness program has been initiated this year to raise aware about the conservation of Lesser Adjutant. This program should be continue to reach the all kind of stakeholders for further conservation of Lesser Adjutant in that areas.

## 6.0 References

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## 7.0 Appendices

### Lesser Adjutant sightings at Dumabari in 2019

**Habitat type: Agricultural fallow land with no men's land**

<b>Date</b>	<b>Habitat type and Block</b>	<b>Weather condition</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>	<b>Activity</b>
06/03/19		Sunny	1	1:45 pm – 3:46 pm	Standing and preening
12/03/19	1397 – 3S		2	3:00 pm – 5:00 pm	2 lesser adjutant was perching tree with 8 Asian open bill
05/04/19	Awal tree on enumerator khurshed uncle house		1	10:05 am – 5:08 pm	Perching tree on 10:05 am – 4:22 pm and later feed on the ground for 4:22 pm – 5:08 pm
17/04/19		Sunny	1	10:12 am – 12:10 pm	Standing and preening perching on a awal tree
18/04/19		Sunny	2	11:46 am – 5:40 pm	Standing and preening perching on a

					awal tree and came to ground before the evening
19/04/19			2	2:55 pm – 6:30 pm	Standing and preening perching on a awal tree and night roost to a toirol tree in Bangladesh
21/04/19	1397 – 5S main pillar		2	2:20 pm – 4:16 pm	Standing and preening perching on a banyan tree
22/04/19	1397 – 5S main pillar and awal tree just behind khurshed house		4	2:10 pm – 4:36 pm	Standing and preening perching on a banyan tree and resting on a awal tree just behind enumerator khurshed house

23/04/19			1	4:00 pm – 6:30 pm	Standing and preening perching on a awal tree
28/04/19			1	3:49 pm – 5:35 pm	
29/04/19	awal tree just behind khurshed house		1	2:27 pm – 3:50 pm	Standing and preening perching on a awal tree
30/04/19	Kurshid uncle house		2	3:20 pm – 4:44 pm	Standing and preening perching on a bon supari tree
02/05/19	1397 – 3S pillar		1	1:42 am – 4:12 pm	Standing and preening perching on a banyan tree
17/05/19	awal tree just front of khurshed uncle house		1	11:50 am – 1:12 pm	Standing and preening perching on a awal tree
18/05/19	awal tree just front of		1	5:34 pm – 6:30 pm	Night roost on the toirol tree in the

	khurshed uncle house				Bangladesh area
10/06/19	Very close to the house of field assistant Khurshed	Little sunny	1	11:34 am – 11:38 am	Soaring on the sky
11/06/19		Little sunny	1	11:20 am – 11:29 am	Soaring on the sky
13/06/19			1	11:05 am – 12:10 pm	Searching food on the field
14/06/19			2	8:40 am – 12:05 pm	Searching food on the field
16/07/19			1	12:40 am	Perching on a tree
17/07/19	North side of dumabari		1	3:08 pm – 5:00 pm	Feed for a while on the ground and later perched on a cotton tree for a long time
08/08/19	1397 – 5S		1	1:30 pm – 1:40 pm	Soaring on the sky

## Lesser Adjutant sightings at Dumabari in 2018

**Habitat type: Agricultural fallow land with no men's land**

Date	Place	Weather	number of Lesser Adjutant	Duration	Activity
02/01/18	Near 1999 - 1S		1	11:33 am - 1:30 pm	Standing and preening
03/01/18	Near 1999 - 1S		1	11:00 am - 12:30 pm	sitting on the branch of the tree
04/02/18	Near 1397 3S pillar		1	11 am - 1:00 pm	Searching for food
05/02/18	Near 1397 – 3S pillar		1	4 : 00 pm - 5 : 00 pm	Standing and preening
07/03/18	Near 1397 3S pillar		1	12:40 pm - 1:12 pm	Searching for food
08/03/18	Near 1399 -3S pillar		1	1:11 pm - 4:00 pm	Searching for food on the grassland
15/03/18			1	12:04 pm - 2:13 pm	was preening
22/03/18	Near 1397 - 3S pillar	slightly raining	1	1:45 pm - 4:00 pm	Searching for food on the grassland
23/03/18	Near 1397 - 3S pillar		1		Searching food on the grassland
13/04/18	Near 1397 - 4S pillar		5	11:50 am - 2:00 pm	2 was sitting in a tree and 3 was sitting in two separate trees
17/04/18	Near 1397 - 4S pillar		4	2:00 pm - 6:00 pm	2 was perching tree, one was soaring and another one searching food in the grassland
19/04/18	Dumabari		1	12pm - 01:00 pm	was preening.

23/04/18	Near 1397 4S pillar		3	12: 00 am - 2:00 pm	2 was sitting in a tree and another was searching food
29/04/18	Beside the Iron Bridge		1	4:12 pm - 7:00 pm	was preening.
07/05/18	Beside 1397 - 4S pillar		5	11:00 am - 11:30 am	5 individual was sitting on the tree after some while 2 individual dropped on the land
11/05/18	Top of the Khurshed house		1	12:00 pm - 1:00 pm	Soaring in the sky
14/05/18	Beside 1397 5S pillar		2	10:05 pm - 2:00 pm	searching for food
16/05/18	Opposite of 1397, 4S pillar		2	1:00 pm - 3:00 pm	perching in a tree for 2 hours
21/05/18	Beside 1399 1S pillar		2		Searching for food
	1396 - 7S pillar		2	11:00 am -;2:00 pm	Sitting on a cotton tree for around 3 hours
22/05/18	Beside 1397 pillar		1	3:00 pm - 5:00 pm	Searching for food
24/05/18	Beside 1396 -7S pillar		2	10:00 am - 1:00 pm	perching a tree for 3 hours
25/05/18	Beside the Iron bridge		3		2 individual was on the grassland and another one was soaring in the sky
28/05/18	North side of Duma bari		2		Searching and waiting for food

29/05/18	Beside 1397 - 3S pillar		1	11:00 am - 4:00 pm	whole time sitting on the tree
30/05/18	Beside 1397 - 3S pillar	It was raining at 5:00 pm	2	11 am - 4:00 pm	One was sitting on ground another one perching tree
31/05/18	Beside 1399 - 1S pillar		2	10:00 am - 2:00 pm	One was sitting on awal tree for 1 hour and another one was on the ground
01/06/18	1397 – 3S and 1397 – 4S	It was raining in the afternoon for 1 hours	2	4:45 pm – 6:20 pm	Soaring on the sky
03/06/18	1397 - 3S pillar and 1399 – 1S	Fully hot and sunny day.	2	10:02 am -4:07 pm	Perching on the tree and dropped on the crop field at the evening
04/06/18	1398 - 1S pillar	Heavy rainy day. The crop field was full of water.	1	11:35 am - 03:00 pm	resting by perching on the tree
06/06/18	1397 - 4S pillar	Sunny but it was rained at night.	1	11: 30 pm	Feeding on the ground
	1397 - 3S pillar		1	12:35 pm	
08/06/18	Beside 1397 - 4S pillar	Very sunny day but it was heavy rained in evening	2	12:05 am - 4:00 pm	Perching on a tree
09/06/18	Beside 1397 - 3S pillar		2	1:00 pm - 3:00 pm	The place was crowded on that day

10/06/18	Top of the Reserve forest		1	1:00 pm - 1:20 pm	Soaring
12/06/18	Opposite of 1397 - 4S pillar	Sunny in the morning and rainy in the evening	2	1:00 pm - 2:00 pm	Quarrelling each other for one hour on the awal tree
13/06/18	Beside 1397 - 4S pillar	Very rainy day for 2 days	2	12 pm - 2:00 pm	Perching on the tree
25/06/18		Slight rainy	1	8:00 am - 4:00 pm	Sitting on a tree and later it dropped on the crop field for a while.
28/06/18	Cotton tree behind 1397 - 3S pillar		1	11:22 am	Perching tree then it came down on the ground.
03/07/18	1397 - 3S and 1399 - 3S		2	10:00 am - 4:00 pm	Standing and preening
12/07/18	Beside 1397 - 3S pillar		1	8:02 am - 5:16 pm	Sitting whole day in a tree
13/07/18	Opposite of 1398 - 2S pillar	Full sunny	1	11:38 am - 4:00 pm	sitting whole time in a tree
25/08/18			1	3:00 pm - 4:20 pm	Soaring top of enumerator khurshed's house
01/09/18	Just top of the Khurshed house	Little bit rainy then sunny	3	1:30 pm – 3:00 pm	Soaring on the sky
08/09/18	1397 – 4S pillar	Heavy rained on 08/09/19	6	12:00 am – 2:46 pm	6 individual was sitting in 3 trees for 1 hour. After that 2 individuals was soaring in the sky. Then 4



					individual was sitting for more than another 1 hour. This was the highest number of Lesser adjutant in the year of 2018
09/09/18	1397 – 4S pillar	Heavy rained on 08/09/18	6		
12/09/18	Top of Komolchara hill	Sunny	1	3:00 pm - 3:30 pm	Soaring on the sky
02/10/18		Full sunny and very hot day	1	9:00 am – 1:00 pm	Soaring on the sky
13/10/18			1	12:19 am – 3:16 pm	Perched after around 7 years in an old awal tree and it was preening around for three hours.
17/10/18	Very close to the house of field assistant Khurshed	Quiet hot	1		Searching food items in the crop field
19/10/18	Beside 1398 - 1s	Full sunny	1	11:02 am – 12:22 pm	Seen Frog and fish was feeding
17/10/18		Little Sunny	1	11:00 am – 1:18 pm	
02/11/18	One was perched in a tree which tree they used for perching		2	1:15 pm – 1:32 pm	

03/11/18	1397- 4S and 3S		2	1:00 pm – 3:00 pm	Searching food items in the crop field
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### **Lesser Adjutant sightings in Silloah in 2019**

**Habitat type: Agricultural fallow land with water body**

<b>Date</b>	<b>Place</b>	<b>Number of Lesser Adjutant</b>	<b>Duration</b>	<b>Activity</b>
08/01/19	Beside silloah high school	1	12:00 pm – 2:07 pm	looking for prey
11/01/19	Beside silloah high school	1	7:20 am - 10:07 am	looking for prey
15/01/19	Beside silloah high school	1	3:02 pm - 5:07 pm	looking for prey
16/01/19	Beside silloah high school	1	3:05 am - 5:30 pm	looking for prey
17/01/19	Beside BGB camp	1		
20/01/19	Beside silloah high school	1	10:17 am – 5:05 pm	looking for prey
21/01/19	Beside silloah high school	2	8:00 am - 10:37 am	One was sitting in a tree and another one was soaring in the sky
23/01/19	Beside BGB camp	1		
25/01/19	Beside silloah high school	2	7:27 am - 11:19 am	One was sitting in a branch of the

				dead tree then it was feeding whole day
26/01/19	Beside silloah high school	2	3:11 pm - 4:54 pm	Feeding some times later was sitting in the dead tree and preening most of the day
27/01/19	Beside silloah high school	1	7:30 am - 11:37 am	One individual was feeding in the grassland with small water for two hours then it was perching tree to take rest for one hour.
29/01/19	Beside silloah high school	1	12:22 pm - 1:00 pm	One individual was feeding for thirty minutes then it was rushed by humans.

05/02/19	Beside silloah high school	2	4:00 pm - 5:02 pm	It was heavily rained then two individual was feeding on the small water of grassland.
08/02/19	Beside silloah high school	1	3:45 pm – 5:31 pm	One individual was remaining in the whole day
09/02/19	Beside silloah high school	1	4:04 pm - 5:29 pm	It was taking rest on the tree later it dropped the ground for a long time.
10/02/19	Beside silloah high school	1	4:17 pm – 5:38 pm	Feeding on the ground
11/02/19	Beside BGB camp	1	10:15 am – 1:00 pm	Feeding on the ground
13/02/19	Beside BGB camp	1	8:18 am – 11:23 am	Feeding on the ground
17/02/19	Beside BGB camp	1	3:35 pm – 5:10 pm	Feeding on the ground
19/02/19	Beside silloah high school	1	12:09 pm – 2:08 pm	Feeding on the ground

22/02/19	Beside BGB camp	1	11:05 am – 1:17 pm	Feeding on the ground
04/03/19	Beside silloah high school	1	9:45 am – 10:44 am	Feeding on the ground
08/03/19	Beside silloah high school	1	3:05 pm – 5:02 pm	Feeding on the ground
09/03/19	Beside silloah high school	1	1:35 pm – 2:48 pm	Feeding on the ground
22/03/19	Beside BGB camp	1	9:40 am – 10:02 pm	Feeding on the ground
24/03/19	Beside BGB camp	1	10:00 am	Feeding on the ground
29/03/19	Beside BGB camp	1		Feeding on the ground
12/04/19	Beside BGB camp	1		Feeding on the ground
18/04/19	Beside BGB camp	1		Feeding on the ground
13/05/19	Beside BGB camp	1	10:10 am – 12:00 pm pm	Feeding on the ground
13/06/19	Beside BGB camp	1		Prey searching on the ground

## Lesser Adjutant sightings in Silloah in 2018

**Habitat type: Agricultural fallow land with water body**

<b>Date</b>	<b>Place</b>	<b>No of Lesser Adjutant</b>	<b>Duration</b>	<b>Activity</b>
28/03/18	Near Border Guard Bangladesh camp	1	8:10 am – 11:00 am	Feeding on the field
30/03/18	Near Border Guard Bangladesh camp	1	1:00 pm – 2:20 pm	Feeding on the ground
03/04/18	Near Border Guard Bangladesh camp	2	10:34 am – 1:42 pm	Feeding on the ground
	Thal river	1	9:20 am – 10:00 am	Feeding on the river
07/04/18	Near Border Guard Bangladesh camp	1	12:32 pm – 4:47 pm	12:32 pm – 4:47 pm searching food in a paddy field after that it night roost in Kotchurgoal
08/04/18	Right side of Puja tila	2	1:12 pm – 5:22 pm	Searching for prey in the small water basin
09/04/18	Near Border Guard Bangladesh camp	1	7:08 am – 8:52 am	Feeding on the ground
10/04/18	Silloah High School	1	1:00 pm - 5:00 pm	Prey searching and feeding on the ground
30/04/18	Eraligul	2	10:12 pm – 1:19 pm	The place is close to silloah high school

08/05/18	One large nest was found although it was unconfirmed about the nest of Lesser Adjutant			
04/06/18	Lowland of eraligul	2	7:12 am – 1:40 pm	Occasionally found in eraligul
07/06/18	Beside Silloah High School	1	11:00 am - 2:00 pm	Six consecutive day's night roosting in puja hill.
18/06/18	Lowland of eraligul	1	7:03 am – 1:09 pm	Feed on the ground
01/07/18	Near BDR Camp	1	6:30 am – 6:45 pm	Night roost in the adjacent hill
08/07/18	Beside Silloah High School	1	8:00 am - 4:00 pm	Perching tree in the whole day
11/07/18	Near BGB camp	1	6:54 am – 8:45 am	Feeds on the ground
06/08/18	Beside Silloah high school	1	10:00 am - 2:00 pm	Feeds on the field
07/08/18	Beside Silloah high school	1	11:12 am -1:37 pm	The stork then left to the another sighting place in Silloah high school
08/08/18	Beside Silloah high school	1	3:09 pm – 4:07 pm	Feeds on the ground
20/09/18	Near BGB camp	2	8:19 am – 11:23 am	Feeds on the ground
21/09/18	Beside Silloah high school	1	5:00 pm – 5:36 pm	Feeds on the ground
24/09/18	Beside Silloah high school	1	3:30 pm – 5:33 pm	Feeds on the ground
28/09/18	Beside Silloah high school	1	8:18 pm – 9:30 pm	Feeds on the ground
29/09/18	Beside Silloah high school	1	8:09 am – 2:17 pm	Very hot and sunny day. The adjutant was soaring on the sky
30/09/18	Beside Silloah high school	1	8:30 am – 10:04 am	Feeds on the ground
02/10/18	Beside Silloah high school	1	9: 40 am – 10:20 am	

17/10/18	Beside Silloah high school	1	4:00 pm – 5:30 pm	soaring on the sky
24/10/18	Beside Silloah high school	1	2:00 pm – 5:00 pm	soaring on the sky
01/11/18	Beside Silloah high school	2	1:30 pm – 4:19 pm	
02/11/18	Football field of Silloah High School	1	6:22 am – 1:16 pm	One snake was feed by the adjutant
	Near BDR camp	2	6:22 am – 12:43 pm	
09/11/18	Beside Silloah high school	1		Feeds on the ground
11/11/18	Beside Silloah high school	2	3:00 pm – 5:30 pm	
15/11/18	Beside Silloah high school	1	1:00 pm – 5:00 pm	Feeds on the ground
16/11/18	Beside Silloah high school	1	7:50 am – 9:05 am	Feeds on the ground
19/11/18	Beside Silloah high school	1	3: 35 pm – 4:48 pm	
20/11/18	Beside Silloah high school	2	7:20 am – 4:57 pm	Feeds on the ground at morning and later it was perched in nearby koroï tree
21/11/18	Beside Silloah high school	1	7:50 am – 10:19 am	Feeds on the ground



27/11/18	Beside Silloah high school	1	12:05 pm – 3:18 pm	Feeds on the ground
1/12/18	Beside Silloah high school	1	8:25 am – 11:17 am	Feeds on the ground
2/12/18	Beside Silloah high school	1	10:05 am – 2:45 am	Feeds on the ground
9/12/18	Beside Silloah high school	1	12:15 pm – 1:38 pm	Soaring in the sky
10/12/18	Beside Silloah high school	1	3:32 pm – 5:05 pm	Soaring in the sky
11/12/18	Beside Silloah high school	1	7:22 am – 9:33 am	Feeds on the ground
22/12/18	Beside Silloah high school	1	10:07 am – 11:47 am	
24/12/18	Beside Silloah high school	1	9:09 am – 11:31 am	Feeds on the ground
26/12/18	Beside Silloah high school	3	12:30 pm – 2:15 pm	Soaring in the sky

## Lesser Adjutant sightings at Boruli in 2018

### Habitat type: Agricultural fallow land

Date	Habitat type	No. of Lesser Adjutant	Duration	Activity
07/03/18	Large fallow and marshy land	1	4:16 pm – 4:58 pm	Perching n a small tree and preening and later came to the ground
19/03/18	Large agricultural land	1		Feed on ground beside the local market
21/03/18	Large open field	1		Feed on ground beside the local market
22/03/18	Large open field	1		Perched on a rain tree beside the local road
23/03/18	Large open field	1		Feed on ground beside the

				local market
27/03/18	Large open field	1		Perched on a rain tree beside the local road
30/03/18	Agricultural land with low water body	1		Feed on ground beside the local market
02/04/18	Agricultural land with low water body	1		Feed on ground beside the local market

### **Lesser Adjutant sightings in Nalapunji and Kala beel in 2019**

**Habitat type: Fallow land in no men's land**

<b>Date</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>	<b>Activity</b>
23/04/19	2	12: 00 am – 1:22 pm	Feeding on the ground

26/04/19	2	10: 28 am – 3:00 pm	Feeding on the ground
10/08/19	3	1:20 pm – 5:00 pm	Feeding on the ground

### **Lesser Adjutant sightings in Nalapunji and Kala beel in 2018**

**Habitat type: Fallow land in no men's land**

<b>Date</b>	<b>Number of Lesser Adjutant</b>	<b>Duration</b>	<b>Activity</b>
21/03/18	1	11:33 am - 12:02 pm	looking for prey
28/03/18	1	8:13 am - 10:12 am	looking for prey
30/03/18	1	9:30 am - 1:02 pm	looking for prey
10/04/18	1	12:04 pm - 3:24 pm	looking for prey
12/04/18	1	11:16 am - 2:09 pm	looking for prey
18/04/18	2	10:22 am - 11:43 am	One was sitting in a tree and another one was soaring in the sky
21/04/18	2	8:20 am - 4:25 pm	One was sitting in a branch of the dead tree then it was feeding

			whole day
22/04/18	2	9:34 am - 3:35 pm	Feeding some times later was sitting in the dead tree and preening most of the day
27/04/18	1	10:03 am - 1:18 pm	One individual was feeding in the grassland with small water for two hours then it was perching tree to take rest for one hour.
30/04/18	1	12:22 pm - 1:00 pm	One individual was feeding for thirty minutes then it was rushed by humans.
02/05/18	2	1:00 pm - 3:00 pm	It was heavily rained then two individual

			was feeding on the small water of grassland.
03/05/18	1	Whole day	One individual was perching on a tree in the whole day
13/05/18	1	3:30 pm - 6:00 pm	It was taking rest on the tree later it dropped to the ground for a long time.

### **Lesser Adjutant sightings at Sona rupa tea garden in 2019**

**Habitat type: Plain fallow land and valley on tea garden**

<b>Date</b>	<b>Block</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>
12/04/19	11 no.	1	10:00 am
18/04/19	11 no.	1	9:00 am
22/04/19	11 no.	2	Morning
16/05/19	11 no.	1	Morning
26/05/19	13 no.	2	12:30 pm

### **Lesser Adjutant sightings at Sona rupa tea garden in 2018**

**Habitat type: Plain fallow land and valley on tea garden**

<b>Date</b>	<b>Block</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>	<b>Description</b>
12/04/18	13 no section	1	9:30 am – 12:00 pm	Feeding on the ground
17/04/18	13 no. section	1	11:10 am – 1:45 pm	Perching on a koro tree
19/04/18	13 no. section	1	10:00 am – 11:00 am	Feeding on the valley
31/05/18	10 no. section	3	5:45 pm	Soaring on the sky
08/06/18	11 no. section	1	11:22 am – 4:00 pm	Spends 2 - 3 hours perching on tree then feed on the ground
13/06/18	Haor or water body	1	1: 00 pm – 2:16 pm	Feeding on the ground

	of 11 no section			
22/06/18	13 no section	1	10:40 am - 2:00 pm	Feeding on the ground
30/06/18	11 no section	1		
28/11/18	10 no. section	2	1:12 pm – 4:43 pm	Soaring over Sona rupa

### **Lesser Adjutant sightings at south and mid lathitila in 2019**

**Habitat type: Fallow land in no man's land in Bangladesh part**

<b>Date</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>	<b>Activity</b>
22/01/19	1	10:08 am – 4:38 pm	Feed on the ground
23/01/19	1	10:06 am – 12:02 pm	Feed on the ground
07/02/19	1		
08/02/19	2	8:10 am – 12:04 pm	Feed on the ground
10/02/19	1	10:03 am – 4:25 pm	Feed on the ground and later perched on the awal tree
14/02/19	2	10:08 am – 4:40 pm	Feed on the ground and later perched



			on the awal tree
20/02/19	2	7:10 am – 2:40 pm	Perching a tree
25/02/19	2	8:20 am – 4:00 pm	Feed on the ground
07/03/19	2	10:00 am – 3:20 pm	Feed on the ground
10/03/19	2	9:30 am – 3:00 pm	Feed on the ground and later perched on the bon supari tree
21/03/19	1	9:15 am – 3:10 pm	Feed on the ground and later perched on the bon supari tree
30/03/19	1	8:30 am – 3:00 pm	Feed on the ground
06/04/19	2	9:15 am – 4:00 pm	Feed on the ground
07/04/19	2	3:00 pm – 4:45 pm	Feed on the ground

12/04/19	2	10:00 am – 4:30 pm	Feed on the ground and later perched a tree in the Indian side
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### **Lesser Adjutant sightings at south and mid lathitila in 2018**

**Habitat type: Fallow land in no men's land in Bangladesh**

<b>Date</b>	<b>Weather condition</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>	<b>Activity</b>
26/02/18		1	1:02 pm - 4:00 pm	Whole time was perching in a tree
29/02/18		2	8:00 am - 1:00 pm	Whole time feeding on the ground
30/02/18	Sunny	2	10:00 am - 2:00 pm	Was feed with some individual of Open bill Stork
31/03/18	Sunny	2	1:00 pm - 4:00 pm	Preening by perching in a tree
02/03/18	Sunny	1	10:00 am - 3:00 pm	Feeding on the grassland
04/03/18		1	10:00 am - 1:00 pm	Feed on the ground while it was raining
07/03/18		1	11:00 am : 2:00 pm	Feed on the ground
10/03/18		2	8:00 am - 11:00 am	Found sitting on a himel tree
12/03/18		2	11:00 am - 3:00 pm	Feed frogs seen by the enumerator

16/03/18		2	01:00 pm - 3:00 pm	One was sitting in a cotton tree and another was found on the ground
18/03/18		1	4:00 pm - 5:00 pm	Sitting on the ground
21/03/18	Heavily rained	2	10:00 am - 1:00 pm	Was sitting in a dry place of the ground
25/03/18		1	11:00 am - 1:30 pm	
28/03/18	Raining	2	9:00 am - 2:00 pm	Feeding in the bank of the small river while it was raining
30/03/18		1	9:30 am - 10:30 am	Searching food for 1 hour
05/04/18		2	10:22 am – 1:13 pm	Feeding in the bank of the small river. Feeds small fish seen by enumerator. The place was full of water
09/04/18		1	4:00 pm - 6:00 pm	
12/04/18		2		Dropped on a small water body with a flock of Open bill Stork (10 - 15 individual).
11/05/18		2		Rain water was abundant. Putni river was full flow rain water.
25/11/18	Sunny	1	11:10 am - 12:35 pm	Soaring in the sky

**Lesser Adjutant sightings at Dilkusha bazar in 2018**

**Habitat type: Tea garden beside a village**

<b>Date</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>	<b>Activity</b>
22/12/18	2	11: 08 am	Soaring on the sky
25/12/18	2	10: 25 am	Feed on the ground
27/12/18	2	9:50 am	Feed on the ground
30/12/18	2	10:15 am – 4:20 pm	Soaring on the sky

**Lesser Adjutant sightings at Lathitila iron bridge in 2019**

**Habitat type: Fallow land of no man's land in Bangladesh part**

<b>Date</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>	<b>Description</b>
19/01/19	1	12:20 pm – 4:40 pm	Feeds on the ground
20/01/19	1	9:15 am – 3:55 pm	Feeds on the ground
21/01/19	1	9:20 am – 4:25 pm	

24/01/19	1	8:35 am – 4:58 pm	Feed on the ground
25/01/19	1	9:15 am – 4:48 pm	Feed on the ground
	5		Flying 5 individual of Lesser Adjutanttogether
26/01/19	1	9:10 am – 3:50 pm	Feed on the ground
27/01/19	5		Flying 5 individual of Lesser Adjutanttogether
28/01/19	1	4:15 pm – 6:20 pm	Feed on the ground
30/01/19	1	8:10 am – 5:16 pm	Feed on the ground
03/02/19	1	9:20 am	Feed on the ground
04/02/19	1	10:08 am – 4:40 pm	Feed on the ground
05/02/19	1	8:25 am – 4:18 pm	

11/02/19	1	8:05 am – 2:28 pm	
12/02/19	2	11:20 am – 1:18 pm	
13/02/19	2	8:12 am – 3:23 pm	
16/02/19	2	9:15 am – 3:25 pm	
17/02/19	1	8:30 am – 11:00 am	
18/02/19	1	8:10 am – 4:25 pm	
19/02/19	1	9:15 am – 3:30 pm	
21/02/19	2	8:10 am – 3:00 pm	
23/02/19	1	8:07 am – 4:10 pm	
24/02/19	1	11:15 am – 4:15 pm	
27/02/19	2	8:20 am – 3:15 pm	

28/02/19	2	9:10 am – 2:30 pm	
30/02/19	2	8:20 am – 3:15 pm	
01/03/19	2	9:10 am – 2:15 pm	
02/03/19	2	9:15 am – 3:20 pm	
03/03/19	2	8:00 am – 2:20 pm	
04/03/19	2	8:00 am – 3:20 pm	
05/03/19	2	8:00 am – 4:40 pm	Feed on the ground
08/03/19	1	10:00 am – 2:30 pm	
09/03/19	2	8:00 am – 4:20 pm	
11/03/19	2	9:22 am – 10:50 am	Feed on the ground
12/03/19	2	-	
13/03/19	2	-	
14/03/19	2	-	

15/03/19	2	8:20 am – 4:25 pm	
16/03/19	2	8:10 am – 4:10 pm	
17/03/19	2	10:20 am – 4:30 pm	Perching on a toirol tree
18/03/19	2	8:10 am – 4:20 pm	
19/03/19	2	7:30 am – 3:45 pm	
20/03/19	1	8:30 am – 11:30 pm	
24/03/19	1	8:30 am – 1:40 pm	
25/03/19	1	8:00 am – 4:30 pm	Perching whole day on the <i>toirol</i> tree
26/03/19	2	9:30 am – 3:30 pm	
27/03/19	2	10:00 am – 2:00 pm	Feed on the ground
28/03/19	1	8:45 am – 12:30 pm	



29/03/19	1	8:30 am – 4:30 pm	
31/03/19	1	9:00 am – 4:15 pm	Feed on the ground
01/04/19	2	8:00 am – 1:40 pm	
02/04/19	2	8:00 am – 4:50 pm	
03/04/19	1	8:30 am – 1:30 pm	
04/04/19	2	8:00 am – 4:30 pm	Feed on the ground
05/04/19	2	8:10 am – 3:15 pm	
08/04/19	2	8:00 am – 3:20 pm	
09/04/19	2	9:20 am – 3:35 pm	
10/04/19	2	10:20 am – 4:57 pm	
11/04/19	2	8:22 am – 3:40 pm	

13/04/19	2	8:23 am – 4:20 pm	
14/04/19	2	8:00 am – 4:30 pm	
15/04/19	3	8:25 am – 4:20 pm	
16/04/19	2	9:30 – 1:20 pm	
17/04/19	2	8:30 am – 10:00 am	
29/04/19	1	9:52 am – 11:40 am	Feed on the ground also with around 15 Open bill Stork
30/04/19	3	7:22 am – 11:16 am	Feed on the ground also with around 10 Open bill Stork
01/05/19	1	6:30 am – 8:47 am	Feed on the ground
08/06/19	1		
10/06/19	1		
13/06/19	1		

## Lesser Adjutant sightings beside the Iron bridge in lathitila in 2018

**Habitat Type: Fallow land in no man's land in Bangladesh part**

Date	Weather Condition	No. of Lesser Adjutant	Duration	Activity
11/03/18		1	9:40 am – 11:19 am	Feeding on the ground
08/04/18		1	10:40 am - 12:03 pm	Resting and preening for 4 hours
11/04/18		1	12:00 pm - 3:57 pm	Searching for food
13/04/18		1	10:07 am - 12:19 pm	Sitting on the night roosting toirol tree
17/04/18		1	11:10 am - 3:41 pm	Searching for food on the ground
18/04/18		2	9:00 am - 4:15 pm	Was sitting on the toirol tree for two hours
19/04/18		1	9:00 am - 3:33 pm	Searching for food
20/04/18		1	9:00 am - 5:00 pm	Searching for food
21/04/18		1	8:00 am - 3:00 pm	Searching for food
22/04/18		1	9:00 am - 5:00 pm	Searching for food
23/04/18	Rainy	1	11:00 am - 4:00 pm	Searching for food
24/04/18	Rainy	1	9:00 am - 5:00 pm	Searching for food
25/04/18	Rainy	1	2:00 am - 4:00 pm	Searching for food
26/04/18	Rainy	1	10:00 am - 5:00 pm	Searching for food
27/04/18	Rainy	1	8:00 am - 5:00 pm	Searching for food
28/04/18	Rainy	1	8:00 am - 5:15 pm	Searching for food
29/04/18	Rainy	1		

30/04/18	Rainy	1	12:00 am - 5:40 pm	Searching for prey
01/05/18	Rainy	1	9:20 am - 5:00 pm	Searching for prey
02/05/18	Rained on very dawn around 4 am	1	1:40 pm - 5:00 pm	feeding after the rain stopped from 12:00 am - 1:40 pm
03/05/18	Rainy	1	8:15 am - 4:20 pm	Searching for prey
04/05/18	Heavy rained around 9 pm	1	10:11 am - 5:00 pm	Searching for prey
05/05/18	Rainy	1	8:00 am - 3:50 pm	Searching for prey
06/05/18	Rained around 12 pm for 1 hour	1	9:00 am - 6:00 pm	Searching for prey
07/05/18	Rainy	2	9:14 am - 4:00 pm	2 Adjutant was sitting on two different tree
08/05/18		3	9:18 am – 3:30 pm	2 adjutant was searching food in the grass land and another was preening by sitting on a tree
09/05/18	Rained on very dawn around 4 am	2	11:03 am – 2: 30 pm	Water was about to knee of Lesser Adjutant
10/05/18		2	9:00 am - 4:00 pm	One individual left at 1:00 pm and again came after 4:00 pm and stayed night on its night roosting tree.
11/05/18		2	11:00 am - 4:00 pm	Water was abundant both in grassland and river
12/05/18	Rained around 10 am in morning	1	9:00 am - 5:00 pm	searching food, resting tree
13/05/18		1	9:10 am - 11:05 am	searching for food
14/05/18	Rained at night around at 9 pm	1	9:00 am - 5:00 pm	searching food, resting tree
15/05/18		1	7:20 am - 6:10 pm	searching food, resting tree
17/05/18		1	9:00 am - 5:00 pm	searching food, resting tree

18/05/18		2	5:00 pm - 6:30 pm	Water was abundant in the grassland
19/05/18		1	9:00 am - 6:00 pm	searching food, resting tree
20/05/18	Heavy rained around 6 am in morning	1	10:20 am - 4:10 pm	searching food, resting tree
21/05/18		1	9:20 am - 6:10 pm	searching food, resting tree
22/05/18		1	8:30 am - 6:08 pm	searching food, resting tree
23/05/18		1	8:20 am - 4:55 pm	searching food, resting tree
25/05/18		3	8:20 am - 6:23 pm	2 were searching food and another one was soaring
20/06/18		1	9:30 am - 4:00 pm	
02/11/18		1	5:20 pm	

### Lesser Adjutant sightings at North kuchaitol and pechartol in 2018

#### Habitat type: Agricultural land

Date	Place	Weather condition	No, of Lesser Adjutant	Duration	Activity
14/04/18	Pechar tol, crop field of Lulu bhai	2	9:31 am – 3:40 pm	-	Sitting on the top of a <i>Toirol</i> tree on top of the hill

21/04/18	Near large lake of Pechar tol	1	10:08 am – 6:22 pm	-	One small kuchia was found in its bill
26/07/18	Pecharthol	2	10:09 am – 3:32 pm	-	After feeding the stork went to the river side

### **Lesser Adjutant sightings at Kochurgul in 2019**

**Habitat type: Agricultural land**

<b>Date</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>	<b>Activity</b>
03/05/19	1		
06/05/19	1		
07/05/19	1		
08/05/19	1		
09/05/19	2		
13/05/19	2		
14/05/19	1		
20/05/19	1		
22/05/19	1		
25/05/19	1		

### **Lesser Adjutant sightings at Kochurgul in 2018**

**Habitat type: Agricultural land**

<b>Date</b>	<b>Weather condition</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>	<b>Activity</b>
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04/04/18		1	9:20 am – 12:22 pm	Search food on the ground
09/04/18		1	9:18 am – 11:19 am	Soaring on the sky
18/04/18	Sunny	1	10:22 am – 12:00 pm	Search food on the ground
07/05/18		1	9:18 am – 11:00 am	Perching on a koroi tree
16/05/18	Sunny	1	10:22 am – 12:19 pm	Feeding on the ground
3/7/18		1	10:00 am – 1:00 pm	Feeding on the ground

### **Lesser Adjutant sightings at Magura in 2018**

#### **Habitat type: Agricultural land**

<b>Date</b>	<b>Weather condition</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>	<b>Activity</b>
28/04/18		2	2:40 pm - 5:09 pm	Feeds in the water body
07/05/18		1 Lesser Adjutant with three Open bill Stork	9:15 am – 12:24 pm	After feeding they perched on a tree
13/05/18	Light raining	1 Lesser Adjutant with 7 Open bill Stork	10:20 am – 12:16 pm	
14/05/18		1 Lesser Adjutant	4:15 pm – 6:00 pm	
02/06/18		1	8:30 am – 12:11 pm	After feeding they perched on a sirish tree
03/06/18	Sunny	1 Lesser Adjutant with 4 Open bill Stork	12:05 pm – 12:50 pm	After feeding the adjutant takes bath in the water hole
05/06/18		1 Lesser Adjutant with	3:20 pm – 6:18 pm	After feeding it perched in a

		2 Asian Open bill Stork		branch of a tree
08/06/18		1 Lesser Adjutant with 6 Asian Open bill Stork	10:02 am – 1:20 pm	After feeding it perched in a branch of a tree
01/07/18	Sunny	1 Lesser Adjutant with 2 White-throated Kingfisher	05:07 pm – 6:49 pm	Feeding on the ground
05/09/18		1 Lesser Adjutant	9:08 am – 12:42 pm	Feeding on the ground

**Lesser Adjutant sightings beside eidgah, Noyabazar in 2019**

**Habitat type: Plain fallow land**

<b>Date</b>	<b>Habitat type and Block</b>	<b>Weather condition</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>	<b>Description</b>
07/03/19			1	1:45 pm – 3:46 pm	Standing and preening up to 3:46 pm then it came down on the ground
12/03/19			1	3:02 pm – 5:19 pm	Perching in a cotton tree with 8 Open bill Stork
21/04/19		Sunny	1	2:42 pm – 5:16 pm	Two individuals perching on two separate tree
22/04/19		Sunny	1	3:49 pm - 5:12 pm	Perching and preening in a Awal tree



24/04/19		Sunny	1	11:16 am – 1:22 pm	Perching in a cotton tree which was seen from the hill
26/04/19			1		Perching and preening in a Awal tree
02/05/19		Sunny	1	12:37 am – 4:50 pm	Preened for 1 hour and 47 minutes (highest time recorded for preening)
12/07/19	Beside the police headquarter of juri		1	6:47 am – 1:12 pm	Feed on the ground
20/07/19	Noya bazaar water body		1	9:12 am – 11:48 am	Feed on the ground

**Lesser Adjutant sightings beside eidgah, Noyabazar in 2018**

**Habitat type: Plain fallow land**

<b>Date</b>	<b>Place</b>	<b>Weather condition</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>	<b>Activity</b>
09/06/18	Noya bazaar water body	Sunny	1		Perched on a tree
10/06/18	Beside the police headquarter of juri		1		Feed on the ground

12/06/18	Beside the police headquarter of juri		1		Feed on the ground
13/06/18	Beside the police headquarter of juri		1		Feed on the ground
21/06/18	Noya bazaar water body	Sunny	1		Feed on the ground
12/07/18	Beside the police headquarter of juri		1	6:47 am – 1:12 pm	Feed on the ground
20/07/18	Noya bazaar water body		1	9:12 am – 11:48 am	Feed on the ground

### **Lesser Adjutant sightings in west kochurgul in 2019**

**Habitat type: Plain fallow land**

<b>Date</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>	<b>Activity</b>
08/04/19	1	Morning	Feed on the ground
10/04/19	1	Morning	Feed on the ground
13/04/19	1	Morning	Feed on the ground
15/04/19	1	Evening	Feed on the ground
20/04/19	1	Morning	Feed on the ground

11/05/19	1	Morning	Feed on the ground
12/05/19	1	Noon	Feed on the ground
18/05/19	1	Morning	Feed on the ground
27/05/19	1	Noon	Feed on the ground

**Lesser Adjutant sightings at Kuchai in 2019**

**Habitat type: Tea garden with agricultural land**

<b>Date</b>	<b>No. of Lesser Adjutant</b>	<b>Duration</b>	<b>Activity</b>
13/05/19	1		Soaring in the sky
14/05/19	1		Feed on the ground

17/05/19	1		Perched on the tree
20/05/19	1		Feed on the ground
25/05/19	1		Feed on the ground
28/05/19	1		Soaring on the sky
12/06/19	1	Around 12:00 pm	Perching on a dead tree
03/07/19	1	Around 1:00 pm	Perching on the same dead tree

#### **Night roosting by Lesser Adjutant in 2018**

Date	Place	No. of Lesser Adjutant	Other species
11/03/18		1	
20/03/18	Beside Iron Bridge	2	
03/04/18	Beside Iron Bridge	2	
20/04/17	Beside Iron Bridge	7	Asian Open bill Stork – 56

17/04/18	Beside Iron Bridge	1	Black-headed Ibis - 16, Open bill Stork - 26,
05/05/18	Beside Iron Bridge	3	
07/05/18	Beside Iron Bridge	2	
09/05/18	Beside Iron Bridge	1	
10/05/18	Beside Iron Bridge	1	
Date	Place	No. of individual	
07/04/18	Kothurgoal	1	After feeding in a paddy field it roost in kotchurgoal
18/05/18	Beside Southern part of iron bridge	2	
25/06/18	Beside Iron Bridge	1	
30/06/18	Silloah puja hill	1	
01/07/18	Silloah puja hill	1	
02/07/18	Silloah puja hill	1	
03/07/18	Silloah puja hill	1	
04/07/18	Silloah puja hill	1	
29/10/18	Sona rupa tea garden	2	
30/10/18	Sona rupa tea garden	2	
07/11/18	1397 – 3S pillar	3	

### Night roosting by Lesser Adjutant in 2019

Date	Place	No. of Lesser Adjutant	Other species
11/03/18		1	
20/03/18	Beside Iron Bridge	2	
03/04/18	Beside Iron Bridge	2	
20/04/17	Beside Iron Bridge	7	Asian Open bill Stork – 56
17/04/18	Beside Iron Bridge	1	Black-headed Ibis - 16, Open bill Stork - 26,
05/05/18	Beside Iron Bridge	3	
07/05/18	Beside Iron Bridge	2	
09/05/18	Beside Iron Bridge	1	
10/05/18	Beside Iron Bridge	1	
Date	Place	No. of individual	Activity
07/04/18	Kothurgoal	1	After feeding in a paddy field it roost in kotchurgoal
18/05/18	Beside Southern part of iron bridge	2	
25/06/18	Beside Iron Bridge	1	
30/06/18	Silloah puja hill	1	
01/07/18	Silloah puja hill	1	

02/07/18	Silloah puja hill	1	
03/07/18	Silloah puja hill	1	
04/07/18	Silloah puja hill	1	
29/10/18	Sona rupa tea garden	2	
30/10/18	Sona rupa tea garden	2	
07/11/18	1397 – 3S pillar	3	

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