

Breeding Biology in Table

Incubation period of Pallas's Fish Eagle

Incubation duration of Makhordi on 28/10/18 to 25/12/2018 = 57 days

Incubation duration of Makhordi on 29/12/18 to 12/03/19 = 101 days. No eggs were hatch successfully.

Incubation duration of Manik khila on 11/02/19 – 13/04/19 = 58 days

Nestling period of Pallas's Fish Eagle

How many days the young remain in the nest or nestling period

Makhordi : 19/01/2019 - 11/03/19 = 52 days

After how many days the juveniles can fly to get out from their nest

The chick firstly came out from nest on 02/03/19, and their first fly was on 12/03/19.

So, the juveniles can fly to get out from their nest

02/03/19 - 11/03/19 = after 9 days they can fly to get out from their nest.

The first and second juvenile fly away on 12:22 on 11/03/19 am and the third juvenile fly away at 1:32 pm on 17/03/19 in Makhordi.

Post-fledging Period in Makhordi: 11/03/19 – 09/05/19 = 59 days

Post-fledging period in Younuspur: 14/04/19 – 09/05/19 = 25 days

Nests construction period

Place: Manik khila

Date	No. of twigs of pink morning glory <i>Ipomoea carnea</i>	No. of paoura	No. of other materials
05/09/18	4	1	-
06/09/18	3	1	
07/09/18	7	-	-

08/09/18	6	1	1
09/09/18	5	2	-
10/09/18	1	1	1
11/09/18	Rained on the whole day		
12/09/18	3	2	-
13/09/18	4	5	-
15/09/18	No nestling materials collected on that day		
16/09/18	6		1 (leaves of rain tree)
17/09/18	2	4	
18/09/18	3		1 (jhaou)
19/09/18	3	1	-
20/09/18	3	2	1 (jhaou)
21/09/18	2	3	1 (jhaou)
22/09/18	5	-	4 (jhaou), 1 (grass)
23/09/18	2	1	Jahou 3
24/09/18	2	2	Jhaou – 2, grass - 1
25/09/18	3	3	Jhaou – 3, water lily - 1
26/09/18	3	2	Jhaou 1
27/09/18	1	3	Jhaou - 1
28/09/18	4	1	Jhaou – 2, grass – 1
29/09/18	1	-	Jhao – 1, Net - 1
30/09/18	3	-	Jhao – 1, Grass - 1
01/09/18	3	-	Jhaou – 2, Grass - 1
02/09/18	1	2	Jhaou – 3, Grass - 1

Place: Golabari

Arrival date: 06/09/19

Date	No. of twigs of pink morning glory <i>Ipomoea carnea</i>	No. of paoura	No. of other materials
12/09/18	1		
13/09/18	No nestling materials brought on that day		
14/09/18	2	-	Twig with leaves of Mandar tree - 1
15/09/18	1	1	
16/09/18	1	-	-
17/09/18	2	-	-
18/09/18	3	-	-
19/09/18	4	-	-
20/09/18	4	-	-
21/09/18	4	-	-
22/09/18	5	-	-
23/09/18	3	-	-
24/09/18	3	1	Twig with leaves of varun tree -1
25/09/18	4		
26/09/18	4	1	
27/09/18	4	1	
28/09/18	5	1	Twig with leaves of indian oak tree – 1, Twig with leaves of varun tree -1
29/09/18	5	2	Twig with leaves of indian oak tree – 2, Twig with leaves of varun tree 3
30/09/18	5	-	Twig with leaves of indian oak tree – 1, Twig with leaves of varun tree - 2 Leaf of mandar tree - 1
01/10/18	3	2	Twig with leaves of indian oak tree – 1, Twig with leaves of varun tree -1
02/10/18	4		Twig with leaves of varun tree – 1
06/10/18	1	2	Twig with leaves of varun tree – 2, Twig of water lily with leaves - 1

07/10/18	3	2	Leaves of varun tree - 3
08/10/18	3	2	Twig with leaves of varun tree – 2, Twig of water lily with leaves - 2
09/10/18	2	1	Twig with leaves of varun tree – 2, Twig of water lily with leaves – 2 Twig with leaves of indian oak tree - 1
10/10/18	2	2	Twig with leaves of varun tree – 3, Twig with leaves of indian oak tree - 1
11/10/18	5	2	Twig with leaves of varun tree – 3, Twig of water lily with leaves – 1 Twig with leaves of indian oak tree – 3 Nolbon - 1
12/10/18	6	3	Twig with leaves of varun tree – 4, Twig of water lily with leaves –2 Twig with leaves of indian oak tree – 2
13/10/18	7	2	Twig with leaves of varun tree – 2, Twig of water lily with leaves – 1 Twig with leaves of indian oak tree – 2 Nolbon - 1
14/10/18	5	2	Twig with leaves of varun tree – 2, Twig of water lily with leaves –1 Twig with leaves of indian oak tree – 1 Nolbon - 1

15/10/18	3	1	Twig with leaves of varun tree – 1
16/10/18	3	1	-

Place: Shibbari

Arrival date: 03/09/18

Date	No. of twigs of pink morning glory <i>Ipomoea carnea</i>	No. of paoura	No. of other materials
05/09/18	2	-	-
06/09/18	No nestling materials brought the day	-	-
07/09/18	4	-	-
08/09/18	1	-	-
09/09/18	1	-	-
10/09/18	2	-	-
11/09/18	2	-	-
12/09/18	1	-	-
13/09/18	1	-	-
14/09/18	6	2	-
15/09/18	7	-	-
16/09/18	8	-	-
17/09/18	4	-	-
18/09/18	16	2	1 (Twig with leaves of varun tree)

Incubation period

Date	Study area	Female incubation period	Female without incubation	Male on the nestling tree	Male outside the nestling tree	Food items brought by male
05/11/18	Bishara	8 h 50 min	14 min	2 h 35 min	3 h 50 min	The male brought an eel fish and feed on the nest for 2:12 pm – 2:19 pm
06/11/18	Bishara	8 h 34 min	28 min	1 h 43 min	7 h 49 min	The female brought toad from outside at 4:01 pm
08/12/18	Bishara	8 h 57 min	11 min	8 h 8 min	48 min	A small unknown fish was brought by the male at 8:10 am,
24/12/18	Bishara	8 h 55 min	9 min	4 h 32 min	4 h 24 min	Male brought a <i>Boggut labeo</i> fish at 9:01 am and again male brought unknown small fish at 12:43 am
25/12/18	Bishara	8 h 56 min	5 min	57 min	7 h 46 min	The male brought a small wallago catfish in the nest at 9:25 am

26/12/18	Bishara	7 h 56 min	2 min	4 h 5 min	5 h 20 min	The male brought a small striped snakehead in the nest at 9:43 am and one chick of duck was brought at 2:22 pm
17/12/18	Makhordi	8 h 54 min	0 min	1 h 41 min	6 h 11 min	The male didn't bring anything
26/01/19	Makhordi	7 h 34 min	1 h 39 min	4 h 16 min	5 h 56 min	The male brought an unknown fish in the nest at 4:37 pm
27/01/19	Makhordi	8 h 45 min	0 min	0 min	8 h 30 min	The male didn't brought anything in the nest
01/03/19	Younuspur	8 h 53 min	7 min	5 h 26 min	3 h 53 min	The male brought a striped catfish fish at 4:10 pm
04/03/19	Younuspur	9 h 23 min	17 min	5 h 20 min	3 h 57 min	The male brought a spotted snakehead fish at 4:45 pm once.
10/03/19	Younuspur	8 h 51 m	19 min	8 h 48 min	1 h 41 min	The male didn't brought

						anything
26/03/19	Younuspur	8 h 25 m	55 min	7 h 36 min	54 min	Male brought a small spotted snakehead fish at 4:55 pm
07/04/19	Younuspur	9 h	21 min	2 h 56 min	3 h 41 min	The male brought a frog at 11:09 am
08/04/19	Younuspur	8 h 45 min	31 min	4 h 44 min	3 h 29 min	The male brought an unknown fish at 1:21 pm and then the female feed for 1:21 pm – 1:37 pm = 16 minutes
09/04/19	Younuspur	7 h 22 min	12 min	7 h 10 min	16 min	The male didn't bring anything into the nest

Nestling Period

Date	Study Area	Female was beside the nestling tree or tower	Female was outside the nestling tree or tower	Male was outside the nestling tree or tower	Male was beside the nestling tree or tower	Male brought food items
08/03/19	Makhordi	5 hours 11 minutes	1 hour 53 minutes	6 hours 24 minutes	40 minutes	(1)The male brought a mouse at 3:41 pm (2) The male brought a small Snakehead murrelat 5:37 pm
09/03/19	Manik khila	3 hours 35 minutes	6 hours 8 minutes	5 hours 57 minutes	3 hours 35 minutes	The male brought a small Boggut labeo fish at 5:22 pm
12/03/19	Manik khila	1 hour 8 minutes	6 hours 52 minutes	7 hours 19 minutes	41 minutes	Both male and female didn't bring anything on nest
12/03/19	Makhordi	3 hours 48 minutes	3 hours 20 minutes	5 hours 8 minutes	1 hour 58 minutes	(1)Male brought a Boggut labeo fish at 1:51 pm (2) The

						female brought a mouse at 3:39 pm
13/03/19	Makhordi	1 hour 25 minutes	5 hours 52 minutes	7 hours 18 minutes	-	(1)Female brought a Snakehead murrel at 3:43 pm
13/03/19	Kamalpur	7 hours 9 minutes	17 minutes	7 hours 20 minutes	50 minutes	(1)The male bought a Spotted snakehead at 11:12 am and (2) a frog at 2:11 pm and (3)unknown mid-sized fish at 4:52 pm
14/03/19	Ramsinghapur	7 hours 51 minutes	12 minutes	5 hours 46 minutes	3 hours 10 minutes	(1)The male brought a medium Spotted snakehead at 3:13 pm and (2) The male again brought a medium Spotted snakehead at 5:32 pm
15/03/19	Ramsinghapur	7 hours 46 minutes	-	8 hours 11 minutes	1 hour 10 minutes	(1)The male back at 1:18 pm and its left leg there was a frog

						(2)The male brought a frog with grass and mud in its right leg at 4:36 pm
19/03/19	Bishara	3 hours 40 minutes	5 hours 39 minutes	9 hour 10 minutes	9 minutes	(1) One frog which screaming sound was heard clearly chi-chi-chi was brought by an adult at 3:38 pm
21/03/19	Ramsinghapur	6 hours 17 minutes	1 hour 21 minutes	4 hours 34 minutes	2 hours 45 minutes	(1)The male brought a frog on 11:39 pm (2) Male brought a frog at 2:52 pm (3) Male brought a small chick of duck in nest at 3:51 pm
22/03/19	Ramsinghapur	5 hours 9 minutes	1 hour 21 minutes	5 hours 51 minutes	1 hour 39 minutes	(1)The male brought a Boggut labeo fish at 11:39 pm (2)Male brought a frog at 2:52 pm

						(3)Male brought a small chick of domestic duck at 3:51 pm
23/03/19	Ramsinghapur	3 hours 25 minutes	5 hours 9 minutes	8 hours 3 minutes	11 minutes	(1) Male back the tower at 5:14 pm by bringing a frog at 5:14 pm (2)Male brought a frog at 5:57 in the nest (3) The female brought a small Boggut labeo fish at 3:05 pm
24/03/19	Ramsinghapur	4 hours 33 minutes	4 hours 27 minutes	6 hours 29 minutes	1 hour 42 minutes	(1) Male brought a Boggut labeo fish at 10:53 am (2) Male brought a Spotted snakehead at 2:43 pm

Incubation period of Pallas's Fish Eagle

Incubation duration of Makhordi on 28/10/18 to 25/12/2018 = 57 days

Incubation duration of Pathabuka on 29/12/18 to 12/03/19 = 101 days. No eggs didn't hatch successfully.

Incubation duration of Manik khila on 11/02/19 – 13/04/19 = 58 days

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After how many days the juveniles can fly to get out from their nest

The chick firstly came out from nest on 02/03/19, and their first fly was on 12/03/19.

So, the juveniles can fly to get out from their nest

02/03/19 - 11/03/19 = after 9 days they can fly to get out from their nest.

The first and second juvenile fly away on 12:22 on 11/03/19 am and the third juvenile fly away at 1:32 pm on 17/03/19 in Makhordi.

Post-fledging Period in Makhordi: 11/03/19 – 09/05/19 = 59 days

Post-fledging period in Younuspur: 14/04/19 – 09/05/19 = 25 days

Breeding Biology of Pallas's Fish Eagle

Introduction: The chick firstly came out from nest on 02/03/19, and their first fly was on 12/03/19. During their first flight after 12 days out of their nest one chick was fallen in a pond around quarter mile. Later it was caught by local guy and after one day we climbed the tree and keep the chick on their nest. But while keeping the chick on nest another two chicks which were perching nearby branches of nest was fly away since they are afraid to see human close to their nest. After flyi ng they perched a nearby small groves in the whole day and just before evening one chick return their nest safely.

Nest Construction

Nest Construction by Pallas's Fish Eagle in Manik khila

Arrival on:

Date	Time	Weather	Nesting item	Number of twigs	Distance from nest to bring nestling items
05/09/18	9:04 am	sunny	Uzha	1	
	9:13 am		Uzha	1	
	9:56 am		Uzha	2 by both male and female	
	10:00 am		Uzha	1	
	10:17 am		Paoura	1	
06/09/18	8:41 am	Sunny	Uzha	1	

	9:34 am		Uzha	1	
	9:54 am		Paoura	1	
	11:00 am		Uzha	1	
07/09/18	9:25 am	sunny	Uzha	1	
	9:40 am		Uzha	1	
	9:46 am		Uzha	2 by both male and female	
	9:48 am		Uzha	1	
	10:09 am		Uzha	1	
	10:11 am		Uzha	1	
	10:16 am		Uzha	1	
08/09/18	8:50 am		Uzha	1	
	9:00 am		Uzha	1	
	10:02 am		Uzha	1	
	11:35 am		Paoura	1	
	11:40 am		Uzha	1	
	11:46 am		Uzha	1	
	1:20 pm		Uzha	1	
09/09/18	8:40 am		Uzha	1	
	8:48 am		Paoura	2 or both male and female brought together	
	8:52 am		Paoura	1	
	9:01 am		Uzha	1	
	9:50 am		Uzha	2 or both male and female brought together	
	10:54 am		Uzha	1	
	11:00 am		Uzha	1	
10/09/18	8:06 am		Uzha	1	
	11:13 am		Paoura	1	
11/09/18	Rained the whole day				
12/09/18	08:13 am		Uzha	1	
	09:05 am		Uzha	1	
	09:20 am		Paoura	1	
	09:31 am		Uzha	1	
	09:45 am		Paoura	1	
13/09/18	10:09 am		Uzha	1	
	10:15 am		Paoura	1	
	10:30 am		Paoura	1	

	10:40 am		Uzha	1	
	11:30 am		Paoura	1	
	11:35 am		Paoura	1	
	12:10 pm		Uzha	1	
	12:35 pm		Paoura	1	
	1:05 pm		Uzha	1	
14/09/18					
15/09/18	No nestling materials collected on that day				
16/09/18	8:30 am	Sunny	Uzha	1	
	9:40 am		Uzha	2	
	10:20 am		Uzha	1	
	10:25 am		Uzha	1	
	10:40 am		Uzha	1	
	11:00 am		Uzha	1	
	11:10 am		Leaves of raintree	1	
17/09/18	8:15 am	Sunny	Uzha	1	300 feet
	8:28 am		Paoura	1	300 feet
	9:23 am		Paoura	1	300 feet
	10:35 am		Paoura	1	300 feet
	10:50 am		Paoura	1	300 feet
	11:05 am		Uzha	1	300 feet
18/09/18	8:23 am	Sunny	Uzha	1	250 feet
	9:10 am		Paoura	1	250 feet
	9:25 am		Uzha	1	150 feet
	10:05 am		Jhao	1	140 feet
	11:00 am		Uzha	1	120 feet
19/09/18	7:30 am		Uzha	1	170 feet
			Uzha	1	150 feet
	10:02 am		Paoura	1	100 feet
	11:04 am		Uzha	1	200 feet
20/09/18	7:20 am		Uzha	1	140 feet
	8:02 am		Uzha	1	180 feet
	8:15 am		Paoura	1	200 feet
	8:30 am		Jhao	1	300 feet
	9:02 am		Paoura	1	250 feet
	9:30 am		Uzha	1	200 feet

21/09/18	8:15 am		Paoura	2	200 feet
	8:25 am		Paoura	2	250 feet
	9:04 am		Uzha	1	180 feet
	9:30 am		Paoura	1	200 feet
	9:40 am		Jhao	1	350 feet
	10:25 am		Uzha	1	170 feet
22/09/18	7:06 am		Jhao	2	50 feet
	7:10 am		Jhao	1	50 feet
	8:40 am		Uzha	1	180 feet
	9:30 am		Uzha	1	250 feet
	9:40 am		Uzha	1	270 feet
	10:01 am		Uzha	1	300 feet
	10:20 am		Uzha	1	180 feet
	10:25 am		Dubra grass	1	170 feet
	10:50 am		Jhao	1	140 feet
	11:12 am		Jhao	1	140 feet
23/09/18	8:00 am		Jhao	1	100 feet
	8:20 am		Jhao	1	60 feet
	8:30 am		Jhao	1	70 feet
	9:03 am		Uzha	1	160 feet
	9:34 am		Paoura	1	170 feet
	11:20 am		Uzha	1	120 feet
24/09/18	7:30 am		Uzha	1	100 feet
	7:45 am		Jhao	1	100 feet
	7:55 am		Paoura	1	150 feet
	8:01 am		Uzha	1	250 feet
	8:30 am		Dubra grass	1	300 feet
	8:40 am		Jhao	1	180 feet
	10:30 am		Paoura	1	250 feet
25/09/18	8:20 am		Paoura	1	170 feet
	8:35 am		Paoura	1	200 feet
	9:10 am		Paoura	1	250 feet
	9:25 am		Jhao	1	180 feet
	9:50 am		Jhao	1	120 feet
	10:02 am		Uzha	1	200 feet
	10:20 am		Jhao	1	80 feet
	10:30 am		Uzha	2	60 feet
	10:50 am		Sapla	1	350 feet
	1:16 am		Uzha	1	170 feet
26/09/18	7:20 am		Paoura	1	100 feet
	7:32 am		Jhao	1	50 feet
	7:40 am		Uzha	1	100 feet

	8:20 am		Paoura	1	200 feet
	9:32 am		Uzha	1	250 feet
	9:40 am		Uzha	1	250 feet
27/09/18	7:30 am		Paoura	1	170 feet
	7:40 am		Jhao	1	100 feet
	7:55 am		Paoura	1	170 feet
	8:05 am		Uzha	1	200 feet
	9:20 am		Paoura	1	180 feet
28/09/18	7:40 am		Uzha	1	60 feet
	8:02 am		Paoura	1	170 feet
	8:11 am		Jhao	1	100 feet
	8:24 am		Uzha	1	100 feet
	8:30 am		Dubra grass	1	50 feet
	9:04 am		Uzha	1	50 feet
	9:25 am		Uzha	1	180 feet
	9:35 am		Jhao	1	200 feet
	10:30 am		Dubra grass	1	200 feet
29/09/18	8:12 am		Jhao	1	170 feet
	9:20 am		Uzha	1	170 feet
	10:03 am		net	1	250 feet
30/09/18	8:01 am		Uzha	1	170 feet
	8:40 am		Uzha	1	170 feet
	9:10 am		Uzha	1	200 feet
	9:20 am		Jhao	1	120 feet
	9:43 am		Dubra grass	1	170 feet
01/10/18	8:02 am		Uzha	1	170 feet
	8:40 am		Uzha	1	170 feet
	9:10 am		Uzha	1	200 feet
	9:20 am		Jhao	1	120 feet
	9:43 am		Dubra grass	1	170 feet
02/10/18	7:20 am		Uzha	1	180 feet
	7:30 am		Jhao	1	200 feet
	7:48 am		Paoura	1	200 feet
	8:35 am		Paoura	1	160 feet
	9:07 am		Dubra grass	1	200 feet
	9:25 am		Jhao	1	250 feet
	9:35 am		Jhao	1	70 feet

Nest Construction of Pallas's Fish Eagle in Golabari
Arrival date: 06/09/1

Date	Time	Nestling item	Number of items	Distance from the nestling items taken
12/09/18	7:22 am	Uzha	1	300 feet
13/09/18	No nestling items brought on that day			
14/09/18	8:50 am	Uzha	1	150 feet
	11:40 am	Mandal	1	80 feet
	12:10 pm	Uzha	1	150 feet
15/09/18	8:38 am	Uzha	1	250 feet
	1:08 pm	Paoura	1	500 feet
16/09/18	8:45 am	Uzha	1	300 feet
17/09/18	10:42 am	Uzha	1	150 feet
	11:20 am	Uzha	1	150 feet
18/09/18	10:00 am	Uzha	1	100 feet
	11:10 am	Uzha	1	80 feet
	12:02 am	Uzha	1	100 feet
19/09/18	8:25 am	Uzha	1	200 feet
	9:20 am	Uzha	1	220 feet
	11:15 am	Uzha	1	250 feet
	1:45 pm	Uzha	1	200 feet
20/09/18	9:20 am	Uzha	1	150 feet
	11:25 am	Uzha	1	180 feet
	12:30 pm	Uzha	1	250 feet
	12:55 pm	Uzha	1	200 feet
21/09/18	8:20 am	Uzha	1	250 feet
	12:15 pm	Uzha	1	200 feet
	1:55 pm	Uzha	1	300 feet
	2:20 pm	Uzha	1	200 feet
22/09/18	8:20 am	Uzha	1	300 feet
	11:10 am	Uzha	1	220 feet
	1:45 pm	Uzha	1	200 feet
	2:10 pm	Uzha	1	220 feet
23/09/18	11:15 am	Uzha	1	280 feet
	1:04 pm	Uzha	1	200 feet
	3:20 pm	Uzha	1	250 feet
24/09/18	7:15 am	Uzha	1	220 feet
	9:25 am	Uzha	1	300 feet
	11:17 am	Uzha	1	300 feet

	1:45 pm	Leaf with varun tree	1	280 feet
	3:35 pm	Paoura	1	240 feet
25/09/18	9:25 am	Uzha	1	250 feet
	10:15 am	Uzha	1	300 feet
	12:10 pm	Uzha	1	280 feet
	1:45 pm	Uzha	1	350 feet
26/09/18	7:20 am	Uzha	1	270 feet
	8:10 am	Uzha	1	270 feet
	9:45 am	Uzha	1	240 feet
	11:55 am	Paoura	1	180 feet
	1:40 pm	Uzha	1	350 feet
27/09/18	8:25 am	Uzha	1	200 feet
	9:30 am	Uzha	1	250 feet
	10:25 am	Uzha	1	180 feet
	12:50 pm	Uzha	1	250 feet
	1:55 pm	Paoura	1	300 feet
28/09/18	7:45 am	Uzha	1	250 feet
	8:20 am	Uzha	1	200 feet
	9:10 am	Leaves with varun twig	1	50 feet
	10:10 am	Uzha	1	270 feet
	10:55 am	Leaves of hijol with twig	1	50 feet
	11:20 am	Uzha	1	280 feet
	12:25 pm	Uzha	1	290 feet
	2:40 pm	Paoura	1	400 feet
29/09/18	7:55 am	Uzha	1	200 feet
	8:10 am	Uzha	1	250 feet
	8:35 am	Uzha	1	230 feet
	8:55 am	Leaves with hijol tree	1	60 feet
	9:15 am	varun tree with leaves	1	40 feet
	9:55 am	varun twig	1	200 feet
	10:25 am	Uzha	1	250 feet
	11:05 am	Leaves of hijol tree	1	50 feet
	11:45 am	Paoura and Uzha	2	280 feet
	12:15 pm	Twigs with leaves of varun tree	1	50 feet
	12:52 pm	Paoura	1	350 feet
30/09/18	6:35 am	Uzha	1	250 feet
	6:57 am	Uzha	1	250 feet
	7:45 am	Twig of varun	1	200 feet
	8:45 am	Uzha	1	350 feet

	9:25 am	Twig of mandal	1	280 feet
	10:15 am	Uzha	1	250 feet
	11:20 am	Uzha	1	280 feet
	11:45 am	Hijol twig with leaves	1	50 feet
	12:25 pm	Twig with leaves of varun	1	40 feet
01/10/18	7:45 am	Uzauri	1	270 feet
	8:35 am	Uzha	1	250 feet
	8:55 am	Hijol tree	1	60 feet
	9:45 am	varun tree leaves	1	300 feet
	10:35 am	Uzha	1	290 feet
	11:40 am	Paoura	1	350 feet
	12:45 pm	Paoura	1	360 feet
02/10/18	7:25 am	Uzha	1	320vfeet
	7:45 am	Twigs with leaves of varun tree	1	50 feet
	8:10 am	Uzha	1	270 feet
	8:45 am	Uzha	1	250 feet
	9:34 am	Uzha	1	260 feet
06/10/18	6:50 am	Paoura	1	120 feet
	8:33 am	Twig of varun tree	1	100 feet
	10:40 am	Twig of varun tree	1	160 feet
	12:50 pm	Uzha	1	120 feet
	1:42 pm	Paoura	1	120 feet
	1:58 pm	Shapla flower	1	200 feet
07/10/18	7:10 am	Uzha	1	200 feet
	7:20 am	Twig of varun tree	1	20 feet
	8:08 am	Twig of varun tree	1	30 feet
	9:20 am	Paoura	1	200 feet
	10:30 am	Twig of varun tree	1	30 feet
	12:43 pm	Paoura	1	200 feet
	1:30 pm	Uzha	1	120 feet
08/10/18	7:42 am	Twig of varun tree	1	200 feet
	8:10 am	Shapla flower	1	200 feet
	8:25 am	Shapls	1	200 ft
	8:58 am	Twig of varun tree	1	130 feet
	9:02 am	Uzha	1	120 feet
	10:10 am	Paoura	1	200 feet
	11:20 am	Uzha		20 feet
	1:30 pm	Uzha	1	120 feet
	1:34 pm	paora	1	120 feet
09/10/18	7:30 am	Uzha	1	200 feet

	8:18 am	Paoura	1	200 feet
	9:10 am	Shapla	1	120 feet
	9:58 am	Twig of varun tree	1	30 feet
	10:39 am	Twig of varun tree	1	20 feet
	11:57 am	Twig of hijol tree	1	10 feet
	12:33 pm	Uzha	1	120 feet
	1:52 pm	Shapla	1	200 feet
10/10/18	6:38 am	Uzha	1	
	7:48 am	Paoura	1	
	8:38 am	Twig of hijol tree	1	
	9:22 am	Twig of varun tree	1	
	10:03 am	Twig of varun tree	1	
	10:57 am	Uzha	1	
	11:34 am	Paoura	1	
	1:10 pm	Shapla	1	
	1:12 pm	Twig of varun tree	1	
11/10/18	6:58 am	Uzha	1	200 feet
	7:32 am	Paoura	1	300 feet
	7:39 am	Uzhauri	1	120 feet
	8:28 am	Hijol	1	300 feet
	8:38 am	Twig of varun	1	20 feet
	9:30 am	Uzha	1	120 feet
	9:39 am	Shapla	1	400
	10:42 am	Paoura	1	200 feet
	11:13 am	Twig of varun	1	20 feet
	11:45 am	Uzha	1	130 feet
	12:15 pm	Hijol	1	30 feet
	12:55 pm	Nolbon	1	200 feet
	1:32 pm	Varun	1	30 feet
	1:39 pm	Uzha	1	240 feet
	2:38 pm	Hijol	1	30 feet
12/10/18	6:32 am	Uzha	1	200 feet
	7:02 am	Paoura	1	120 feet
	7:35 am	Hijol	1	30 feet
	7:38 am	Varun	1	10 feet
	8:02 am	Shapla	1	300 feet
	8:42 am	Uzha	1	120 feet
	9:09 am	Varun	1	120 feet
	9:27 am	Uzha	1	130 feet
	9:48 am	Hijol	1	30 feet
	10:22 am	Paora	1	200 feet
	10:39 am	Varun	1	20 feet

	11:29 am	Uzha	1	120 feet
	11:58 am	Uzha	1	100 feet
	12:42 pm	Paoura	1	200 feet
	1:02 pm	Varun	1	120 feet
	1:32 pm	Shapla	1	300 feet
	2:32 pm	Uzha	1	200 feet
13/10/18	6:31 am	Uzha	1	100 feet
	7:02 am	Uzha		200 feet
	7:30 am	Uzha	1	100 feet
	8:00 am	Uzha	1	120 feet
	8:28 am	Paora		200 feet
	8:59 am	Twig of Varun tree	1	10 feet
	9:25 am	Twig of varun tree	1	10 feet
	9:49 am	Uzha	1	200 feet
	10:10 am	Leaf if hijol tree	1	20 feet
	10:36 am	Nol bon	1	300 feet
	11:01 am	Shapla leaf	1	200 feet
	11:57 am	Uzha	1	100 feet
	12:35 pm	Paoura	1	120 feet
	1:20 pm	Leaf of hijol tree	1	30 feet
	1:30 pm	Uzha	1	20 feet
14/10/18	6:38 am	Uzha	1	120 feet
	7:30 am	Paoura	1	200 feet
	8:01 am	Uzha	1	200 feet
	8:37 am	Twigs of varun tre	1	30 feet
	9:09 am	Uzha	1	140 feet
	9:34 am	Leaf of hijol tree	1	20 feet
	10:10 am	Uzha	1	200 feet
	10:39 am	Shapla	1	120 feet
	11:49 am	Paoura	1	200 feet
	12:25 pm	Uzha	1	120 feet
	1:20 pm	Twig of Varun tree	1	30 feet
	2:00 pm	Twig of mandar tree	1	30 feet
15/10/18	7:12 am	Uzha	1	200 feet
	8:00 am	Uzha	1	120 feet
	9:20 am	Paoura	1	200 feet
	10:30 am	Uzha	1	130 feet
	11:42 am	Twig of Varun tree	1	30 feet
16/10/18	7:58 am	Uzha	1	100 feet
	8:30 am	Paoura	1	300 feet
	10:00 am	Uzha	1	100 feet
	11:32 am	Uzha	1	130 feet

**Nests Constructions of Pallas's Fish Eagle in Shibbari
Arrival on 03/09/18**

Date	Time	Weather	Nesting item	Number of items	Distance of the place brought the nestling materials from the nest
05/09/18			2 twigs		
07/09/18			4 twigs		
08/09/18			1 twig		
09/09/18			1 twig		
12/09/18	7:57 am		Uzauri	1	
	12:12 pm		Paoura	1	
13/09/18	10:18 am		Uzau	1	
	12:38 pm		Uzha	1	
14/09/18	8:18 pm		Uzha	1	
	8:26 am		Uzha	1	
	8:30 am		Uzha	1	
	8:35 am		Uzha	1	
	9:16 am		Uzha	1	30 feet
	9:26 am		Uzha	1	30 feet
	9:35 am		Paoura	2	100 feet
15/09/18	8:30 am		Uzha	2	
	8:45 am		Uzha	1	
	9:26 am		Uzha	1	
	9:35 am		Uzha	1	
	9:54 am		Uzha	1	
	10:05 am		Uzha	1	
16/09/18	7:39 am	Sunny	Uzha	1	15 feet
	7:40 am		Uzha	1	20 feet
	7:43 am		Uzha	1	50 feet
	7:50 am		Uzha	1	70 feet
	7:56 am		Uzha	1	60 feet
	11:03 am		Uzha	1	200 feet
	11:11 am		Uzha	1	100 feet
	11:16 am		Uzha	1	10 feet
17/09/18	7:24 am	Sunny	Uzha	1	20 feet
	7:55 am		Uzha	1	100 feet
	8:20 am		Uzha	1	110 feet

	9:43 am		Uzha	1	100 feet
18/09/18	7:00 am	Sunny	Uzha	2	30 feet
	7:15 am		Uzha	1	100 feet
	7:29 am		Uzha	1	110 feet
	7:34 am		Uzha	1	130 feet
	7:39 am		Uzha	1	300 feet
	8:03 am		Uzha	1	600 feet
	8:07 am		Uzha	1	50 feet
	8:17 am		Paoura	1	120 feet
	8:42 am		Uzha	1	130 feet
	8:29 am		Twig of varun tree	1	300 feet
	8:35 am		Uzha	2	100 feet
	8:49 am		Uzha	1	300 feet
	8:53 am		Uzha	2	120 feet
	9:15 am		Uzha	1	130 feet
	9:23 am		Uzha	1	200 feet
	10:17 am		Paoura	1	150 feet

Incubation period

Date: 05/11/18

Study Area: Bishara

The female incubates for

8:00 am – 12:25 pm = 4 hours 25 minutes

12:27 pm - 2:12 pm = 1 hour 45 minutes

2:19 pm – 3:17 pm = 58 minutes

3:22 pm – 5:04 pm = 1 hour 42 minutes

Total – 8 hours 50 minutes

The female was outside the nest for

12:25 pm - 12:27 pm = 2 minutes

2:12 pm - 2:19 pm = 7 minutes

3:17 pm – 3:22 pm = 5 minutes

Total – 14 minutes

The male was on the nestling tree for

12:25 pm – 12:34 pm = 9 minutes

12:57 pm – 1:19 pm = 22 minutes

1:21 pm – 1:38 pm = 17 minutes

1:49 pm – 2:49 pm = 1 hour

3:07 pm – 3:54 pm = 47 minutes

Total – 2 hours 35 minutes

The male was outside the nestling tree for

10:49 am – 11:31 am = 42 minutes

11:32 am – 12:24 pm = 52 minutes

12:34 pm – 12:57 pm = 23 minutes

1:19 pm – 1:21 pm = 2 minutes

12:49 pm – 2:12 pm = 23 minutes

2:49 pm – 3:07 pm = 18 minutes

3:54 pm – 5:04 pm = 1 hour 10 minutes

Total – 3 hours 50 minutes

The male brought an eel fish and feed on the nest for 2:12 pm – 2:19 pm

The female feed the remaining part of eel fish that was brought by male 2:12 pm for

4:11 pm – 4:13 pm and 4:20 pm – 4:21 pm

Date: 06/11/18

Study Area: Bishara

The female incubates for

8:02 am – 12:22 pm = 4 hours 20 minutes

12:30 pm – 3:04 pm = 2 hours 34 minutes

3:11 pm – 3:53 pm = 42 minutes

4:06 pm – 5:04 pm = 58 minutes

Total – 8 hours 34 minutes

The female was outside the nest for

3:04 pm – 3:11 pm = 7 minutes

3:53 pm – 4:06 pm = 13 minutes

5:04 pm – 5:12 pm = 8 minutes

Total – 7 minutes + 13 minutes + 8 minutes = 28 minutes

The male was on the nestling tree

10:55 am – 10:57 am = 2 minutes

12:04 pm – 12:05 pm = 1 minutes

12:23 pm – 1:02 pm = 39 minutes
1:43 pm – 1:47 pm = 4 minutes
2:32 pm – 2:59 pm = 27 minutes
4:08 pm – 4:38 pm = 30 minutes

Total – 1 hour 43 minutes

The male was outside the nestling tree for

8:02 am – 10:55 am = 2 hours 53 minutes
10:57 am – 12:04 am = 1 hour 7 minutes
12:05 pm – 12:23 pm = 18 minutes
1:02 pm – 1:43 pm = 41 minutes
1:47 pm – 2:32 pm = 45 minutes
2:59 pm – 4:08 pm = 1 hour 9 minutes
4:38 pm – 5:34 pm = 56 minutes

Total time the male was outside the nestling tree for 7 hours 49 minutes

The male incubates 3:04 pm – 3:53 pm = 49 minutes while female went out for drinking water

The female brought toad from outside at 4:01 pm and the male feed for 4:01 pm – 4:03 pm = 2 minutes

The female feeds by going out at 3:53 pm – 4:01 pm = 8 minutes

Date: 08/12/18

Study Area: Bishara

The female was incubating for

8:32 am – 9:04 am = 32 minutes
9:06 am – 9:55 am = 49 minutes
9:58 am – 4:55 pm = 6 hours 57 minutes

Total – 8 hours 18 minutes

The female was outside for

9:04 am – 9:06 am = 2 minutes
9:55 am – 9:58 am = 3 minutes
3:22 pm – 3:28 pm = 6 minutes

Total – 11 minutes

The male was on the nestling tree

8:10 am – 8:17 am = 7 minutes
8:27 am – 8:49 am = 22 minutes

8:50 am – 9:44 am = 54 minutes
9:58 am – 10:50 am = 52 minutes
11:07 am - 5:00 pm = 5 hours 53 minutes

Total – 8 hours 8 minutes

The male was outside the nestling tree

8:04 am – 8:10 am = 6 minutes
8:17 am – 8:27 am = 10 minutes
8:49 am – 8:50 am = 1 minutes
9:44 am – 9:58 am = 14 minutes
10:50 am – 11:07 am = 17 minutes

Total – 48 minutes

A small unknown fish was brought by male at 8:10 am, Female didn't seen to feed

Date: 24/12/18

Study Area: Bishara

The female standing for

8:13 am – 8:17 am = 4 minutes
8:35 am – 8:37 am = 2 minutes
9:01 am – 9:04 am = 3 minutes

Total – 9 minutes

The female incubates for

8:17 am – 8:35 am = 18 minutes
8:37 am – 9:01 am = 24 minutes
9:04 am – 5:17 pm = 8 hours 13 minutes

Total time for female incubation = 8 hours 55 minutes

The male was on the nestling tree

7:02 am – 8:20 am = 1 hour 18 minutes
9:01 am – 9:29 am = 28 minutes
12:43 pm – 3:29 pm = 2 hours 46 minutes

Total – 4 hours 32 minutes

The male was outside the nestling tree

8:20 am – 9:01 am = 41 minutes
9:29 am – 12:43 pm = 3 hours 14 minutes
3:29 pm – 4:58 pm = 29 minutes

Total – 4 hour 24 minutes

Male brought a *Labeo gonius* fish at 9:01 am and again male brought unknown small fish at 12:43 am

The female didn't see to feed anything on the nest.

Date: 25/12/18

Study Area: Bishara

The female was outside the nest for

8:20 am – 8:23 am = 3 minutes
9:25 am – 9:27 am = 2 minutes

Total – 5 minutes

The female incubates for

8:13 am – 8:20 am = 7 minutes
8:23 am – 9:25 am = 1 hour 2 minutes
9:27 am – 5:14 pm = 7 hours 47 minutes

Total incubation time by female = 8 hours 56 minutes

The male was on the nestling tree

9:25 am – 9:34 am = 9 minutes
1:41 pm – 2:29 pm = 48 minutes

Total – 57 minutes

The male was outside the nestling tree

8:13 am – 9:25 am = 1 hour 12 minutes
9:34 am – 1:41 pm = 4 hours 7 minutes
2:29 pm – 4:56 pm = 2 hours 27 minutes

Total – 7 hour 46 minutes

The male brought a small wallago catfish in the nest at 9:25 am

Date: 26/12/18

Study Area: Bishara

The female was outside the nest for

9:02 am – 9:04 am = 2 minutes

Total – 2 minutes

The female incubates for 9:04 am – 5:00 pm = 7 hours 56 minutes

Total – 7 hours 56 minutes

The male was on the nestling tree

7:35 am – 8:55 am = 1 hour 20 minutes

9:43 am – 11:41 am = 1 hour 58 minutes

4:13 pm – 5:00 pm = 47 minutes

Total time the male was on the nestling tree = 4 hours 5 minutes

The male was outside the nestling tree

8:55 am – 9:43 am = 48 minutes

11:41 am – 4:13 pm = 4 hours 32 minutes

Total time the male was outside the nestling tree = 5 hours 20 minutes

The male brought a small striped snakehead in the nest at 9:43 am and one chick of duck was brought at 2:22 pm

The female feed at 9:43 am for 9:43 am – 9:44 am = 1 minute

Date: 17/12/19

Study Area: Makhordi

The female didn't stand up in the whole day not a single time also didn't give any call. The female also do not move any other direction rather sitting in a one position.

Total time the female incubates for 8:20 am – 5:14 pm = 8 hour 54 minutes

The male was on the nestling tree

9:41 am – 10:42 am = 59 minutes

3:40 pm – 4:22 pm = 42 minutes

Total – 1 hour 41 minutes

The male was outside the nestling tree

8:20 am – 9:41 am = 1 hour 21 minutes

10:42 am – 3:40 pm = 4 hours 58 minutes

4:22 pm - 5:14 pm = 52 minutes

Total – 6 hours 11 minutes

Date: 26/01/19

Study area: Makhordi

The female incubates for

8:12 am – 9:32 am = 1 hour 20 minutes

11:11 am – 5: 25 pm = 6 hour 14 minutes

Total – 7 hour 34 minutes

The female standing for

The female went to nearby wetland for 9:32 am - 10:42 am = 1 hour 10 minutes
and standing nearby nest for 10:42 am - 11:11 am = 29 minutes

Total time the female was outside the nest for = 1 hour 39 minutes

The male was on the nestling tree

8:12 am – 8:42 am = 30 minutes

9:12 am – 11:10 am = 1 hour 58 minutes

4:37 pm – 5:25 pm = 1 hour 48 minutes

Total = 4 hours 16 minutes

The male was outside the nestling tree

8:42 am -9:12 am = 30 minutes

11:11 am – 4:37 am = 5 hours 26 minutes

Total = 5 hours 56 minutes

The male brought an unknown fish in the nest at 4:37 pm

The female wasn't seen for feeding anything in the whole day

Date: 27/01/19

Study Area: Makhordi

The female standing for

The female didn't stand from the nest 8:15 am - 5:00 pm = 8 hours 45 minutes

The female incubates on the nest for

8:15 am - 5:00 pm = 8 hours 45 minutes

The male was outside the nestling tree

8:15 am – 5:00 pm = 8 hours 30 minutes

The male didn't brought anything in the nest

Date: 01/03/19

Study Area: Younuspur

The male was outside the nestling tree

11:01 am – 11:27 am = 26 minutes

12:43 pm – 4:10 pm = 3 hours 27 minutes

Total = 26 minutes + 3 hours 27 minutes = 3 hours 53 minutes

The male brought a striped catfish fish at 4:10 pm

The male was beside the nestling tree for

8:40 am – 11:00 am = 2 hours 20 minutes

11:27 am – 12:43 pm = 1 hour 16 minutes

4:10 pm – 6:00 pm = 1 hour 50 minutes

Total = 5 hours 26 minutes

The female was outside the nest and sit another branch of tree for 11:10 am – 11:37 am = 7 minutes

The female was incubating for

8:40 am – 11:10 am = 2 hours 30 minutes

11:37 am – 6:00 pm = 6 hours 23 minutes

Total = 8 hours 53 minutes

Date: 04/03/19

Study Area: Younuspur

The male was in the nestling tree for

9:58 am – 11:09 am = 1 hour 11 minutes

12:43 am – 1:19 pm = 36 minutes

1:39 pm – 3:57 pm = 2 hours 18 minutes

4:45 pm – 6:00 pm = 1 hour 15 minutes

Total = 1 hour 11 minutes + 36 minutes = 1 hour 47 minutes + 2 hours 18 minutes + 1 hour 15 minutes = 5 hours 20 minutes

The male was outside the nestling tree for

8:43 am – 9:58 am = 75 minutes = 1 hour 15 minutes

11:09 am – 12:43 pm = and 1:19 pm – 1:39 pm,

3:57 am – 4:45 pm = 1 hour 34 minutes + 20 minutes + 48 minutes = 2 hours 42 minutes

Total time the male was outside the nestling tree for = 2 hours 42 minutes + 1 hour 15 minutes = 3 hours 57 minutes

The female was outside the nest and went towards water body for

3:49 pm – 4:06 pm = 17 minutes

The female was incubating for

8:20 am – 3:49 pm = 7 hours 29 minutes

4:06 pm – 6:00 pm = 1 hour 54 minutes

Total – 9 hours 23 minutes

The male brought a spotted snakehead fish at 4:45 pm once.

Date: 10/03/19

Study Areas: Younuspur

The female was incubating on the nestling tree for

8:58 am – 10:17 am = 1 hour 19 minutes

10:17 am – 11:41 am = 1 hour 24 minutes

11:52 pm – 6:00 pm = 6 hours 8 minutes

Total incubation = 8 hours 51 minutes

The female was outside the nest from incubation

10:17 am – 10:25 am = 8 minutes

11:41 am – 11:52 am = 11 minutes

Total time female was outside from incubation = 19 minutes

The male was also outside the nestling tree for

10:17 am – 11:09 am = 52 minutes

1:27 pm – 2:16 pm = 49 minutes

Total time the male was outside the nestling tree for = 52 minutes + 49 minutes = 1 hour 41 minutes

The male didn't brought anything at 11:09 am

The male didn't brought anything at 2:16 pm

The male was on the nestling tree for

8:58 am – 10:17 am = 1 hour 19 minutes

The male then on the nest with the female for 11:09 am – 1:27 pm = 2 hours 18 minutes

Male was on the nestling tree for 12:00 pm – 1:27 pm and 2:16 pm – 6:00 pm = 1 hour 27 minutes + 3 hours 44 minutes

**Total time Male was on the nestling tree = 1 hour 19 minutes + 2 hours 18 minutes + 5 hours 11 minutes
= 8 hours 48 minutes**

Date: 26/03/19

Study Areas: Younuspur

Male was just beside the nestling tree for 9:30 am – 12:27 pm = 2 hours 57 minutes

The male brought a rice grass at 12:38 pm

Female was incubating for

9:30 am – 11:07 am = 1 hour 37 minutes

11:29 am – 12:52 pm = 1 hour 23 minutes

1:17 pm – 3:50 pm = 3 hours 23 minutes

3:58 pm – 6:00 pm = 2 hours 2 minutes

Total – 8 hours 25 minutes

Female was outside the nest for

11:07 am – 11:29 am = 22 minutes

12:52 pm – 1:17 pm = 25 minutes

3:50 pm – 3:58 pm = 8 minutes

Total time the Female was outside the nest – 55 minutes

One twig is brought by male at 12:32 pm

Male is found spreading its wings on the nest at

12:38 pm – 12:47 pm = 9 minutes

12:51 pm – 12:52 pm = 1 minute

Both male and female stand up on the nest for 12:52 pm – 1:17 pm = 25 minutes

Male is also incubating for 2:33 pm – 3:54 pm = 1 hour 21 minutes

Male was beside the nestling tree for

12:38 pm – 4:12 pm = 3 hours 34 minutes

4:55 pm – 6:00 pm = 1 hour 5 minutes

Total time male was beside the nestling tree = 2 hours 57 minutes + 3 hours 34 minutes + 1 hour 5 minutes = 7 hours 36 minutes

Male was outside from the nestling tree for

12:27 pm – 12:38 pm = 11 minutes

4:12 pm – 4:55 pm = 43 minutes

Total time male was outside the nestling tree for 11 minutes + 43 minutes = 54 minutes

Male brought a small spotted snakehead fish at 4:55 pm

Date: 07/04/19

Study Areas: Younuspur

The female was incubation on the nest for

8:20 am – 10:17 am = 1 hour 57 minutes

10:25 am – 4:19 pm = 5 hours 54 minutes

4:32 pm – 5:41 pm = 1 hour 9 minutes

Total time for incubation = 1 hour 57 minutes + 5 hours 54 minutes + 1 hour 9 minutes = 9 hours

The female was outside from the nest 10:17 pm – 10:25 pm = 8 minutes

The female stand on the nest for

11:14 am – 11:39 am = 25 minutes and

3:15 pm – 3:48 pm = 25 minutes

The female was outside the nest and sat a branch of the nestling tree for 4:19 pm – 4:32 pm = 13 minutes

Total time the female was outside from the nest for 8 min + 13 min = 21 min

Total standing = 63 minutes = 1 hour 3 minutes

The male was on the nestling tree for 8:20 am – 10:19 am = 1 hour 59 minutes

The male then was also sitting on the nest beside the female for 11:09 pm – 12:54 pm = 1 hour 45 minutes

The male was on the nestling tree for 4:16 pm – 5:41 pm = 57 minutes

Total time on the nestling tree for 3 hours 41 minutes

The male brought a frog at 11:09 am

The male was outside from the nestling tree for 10: 19 pm – 11:09 am = 50 minutes

The male then outside the nestling tree for 12:54 pm – 3:38 pm = 2 hours 44 minutes

The male was outside the nestling tree for 3:38 pm – 4:16 pm = 38 minutes

Total time outside the nestling tree by the male 4 hours 12 minutes

The male didn't brought anything at 4:16 pm

Date: 08/04/19

Study Areas: Younuspur

The male was beside the nestling tree for 8:44 am – 9:22 am = 38 minutes

The male then sit beside the female on nest for 9:22 am – 9:52 am = 30 minutes

The male was perching tree beside the nest for 1:21 pm – 4:08 pm = 2 hours 47 minutes

The male was also on the nest for 4:08 pm – 4:45 pm = 37 minutes

After that the male perched on the nestling tree again for 4:45 pm – 5:57 pm = 1 hour 12 minutes

Total time the male was beside the nestling tree for 4 hours 44 minutes

Male was outside the nestling tree for 9:52 am – 1:21 pm = 3 hours 29 minutes

The male brought an unknown fish at 1:21 pm and then the female feed for 1:21 pm – 1:37 pm = 16 minutes

The female get out from the nest for 10:15 am -10:18 am = 3 minutes
 Again get out from the nest for 10:20 am – 10:48 am = 28 minutes

The female was in incubating for 8:44 am – 10:15 am = 1 hour 31 minutes
 Again incubating for 10:15 am – 10:20 am = 5 minutes
 Again incubating for 10:48 am – 5:57 pm = 7 hours 9 minutes

Total time for incubation = 8 hours 45 minutes

Date: 09/04/19

Study Areas: Younuspur

The male was on the nestling tree for 10:12 am – 5:05 pm = 6 hours 53 minutes
 The male was on the nest with the female for 5:19 pm – 5:36 pm = 17 minutes

Total time male on the nestling tree for – 7 hours 10 minutes

The male was outside from the nestling tree for 5:05 pm – 5:19 pm = 16 minutes
 The male didn't bring anything into the nest at 5:19 pm

Total time the male was outside beside the nestling tree for – 16 minutes

The female was incubating for 10:12 am – 2:45 pm = 4 hours 33 minutes
 The female again incubating for 2:48 pm – 4:34 pm = 1 hour 56 minutes
 The female again incubating for 4:43 pm – 5:36 pm = 53 minutes

Female total time for incubation – 7 hour 22 minutes

The female was outside the nest for 2:45 pm – 2:48 pm = 3 minutes
 The female was feeding something on the nest with its beak at 4:34 pm – 4:43 pm = 9 minutes

Total time female without incubation – 12 minutes

The female get out from the nest with a spine of fish and throw away it outside the nest at 5:36 pm

After Fledging

Date: 08/03/19 Place: Makhordi

1st Week	2 nd Week	3 rd Week	4 th Week	5 th Week
Date: 01/03/19 – 01/03/19 - 11/03/9	Date: 08/03/19 – 12/03/9 -	Date: 15/03/19 – 21/03/19	Date: 22/03/19 – 28/03/19	
1 feet. Just beside the nest by two chicks. Another chick was on the nestling tree.	Graveyard			

Nestling

Date: 09/02/19

Place: Kamalpur

Both male and female was perching tree for beside the nest for 10:00 am – 11:06 am = 66 minutes

The male went to the haor for 11:06 am – 1:04 pm = 118 minutes

Female searching for prey for 1:04 pm – 1:09 pm = 5 minutes

Crows disturb the chicks at 1:06 pm

The male was on the nest and feed the chicks a fish at 1:44 pm – 2:22 pm = 38 minutes

The male left the with the left over fish at 2:33 pm – 4:42 pm = 2 hours 9 minutes

The female feed the left over of that fish for 3:03 pm – 3:07 pm = 4 minutes

Female was also inside the nest for 3:08 pm – 4:00 pm = 52 minutes

The female have taken a rat from the banana tree at 3:28 pm and feed the young's for 3:29 pm – 3:30 pm = 1 minutes; possibly the young's can feed by themselves

Date: 12/02/19

Place: Kamalpur

The male was in a lower branch of nestling tree for 8:20 am – 10:41 am = 2 hours 21 minutes

The male went outside for 10:41 am – 11:21 am =

One fish was brought by male at 11:21 am

The female was also the nestling tree for 8:20 am -

Date: 09/02/19

Place: Kamalpur

Female was present beside the nest perching tree for 9:04 am – 12:06 am = 3 hours 2 minutes

Male was on the nestling tree for 9:04 am – 11:06 am = 2 hours 2 minutes

Female was outside the nestling tree for 12:06 pm – 12:37 pm = 31 minutes

Female again perching beside the nestling tree for 12:37 pm – 5:16 pm = 4 hours 39 minutes

The male went to the haor for 11:06 am – 1:44 pm = 2 hours 38 minutes

The male brought a fish at 1:44 pm and feed the young's for 1:44 pm – 2:22 pm = 38 minutes

Male was on the nestling tree – Total –

The male was beside the nestling tree for 2:22 pm – 2:33 pm = 10 minutes

The male left the nest for haor with the left-over fish for 2:33 pm – 4:42 pm = 2 hours 8 minutes

The male was beside the nestling tree for 4:42 pm – 5:16 pm = 34 minutes

The female feeds from the left over of the young's for 3:03 pm – 3:07 pm = 4 minutes

The female was inside the nest for 3:08 pm – 4:02 pm = 54 minutes

The female has taken a mouse from the banana tree beside the nestling tree at 3:29 pm and feed the young for 3:29 pm -3:30 pm = 1 minutes

Date: 08/03/19

Place: Makhordi

The male was outside the nestling tree for 10:12 am – 12:43 pm = 2 hours 31 minutes

The male was outside the nestling tree for 1:15 pm – 3:41 pm = 2 hours 26 minutes

The male was outside the nestling tree for 3:49 pm – 5:16 pm = 1 hour 27 minutes

Total time the male was outside the nestling tree for 2 hours 31 minutes + 2 hours 26 minutes + 1 hour 27 minutes = 6 hours 24 minutes

The male brought a mouse at 3:41 pm

Total time the female was outside the nestling tree for 1:15 pm - 3:08 pm = 1 hour 53 minutes

The female was beside the nestling tree for 10:12 am – 1:15 pm = 3 hours 3 minutes

The female was beside the nestling tree for 3:08 pm – 5:16 pm = 2 hours 8 minutes

Total time the female was beside the nestling tree for 3 hours 3 minutes + 2 hours 8 minutes = 5 hours 11 minutes

The male brought a small shoal fish at 5:37 pm

The male was beside the nestling tree for 12:43 pm – 1:15 pm = 32 minutes

The male was beside the nestling tree for 3:41 pm – 3:49 pm = 8 minutes

Total time the male was beside the nestling tree for 32 minutes + 8 minutes = 40 minutes

Date: 14/03/19

Study Areas: Ramsinghapur

The male was on the nestling tower for 8:46 am – 10:29 am = 1 hour 43 minutes

The male was then was perching on the nestling tower for 12:27 pm – 1:33 pm = 1 hour 6 minutes

The male was on the nestling tower for 2:12 pm – 2:15 pm = 3 minutes

Both male and female was on the nest for 3:13 pm – 3: 22 pm = 9 minutes

Both male and female then perching the tower for 3:22 pm – 3:43 pm = 9 minutes

Total time male was on the nestling tower for 1 hour 43 minutes + 1 hour 6 minutes + 3 minutes + 9 minutes + 9 minutes = 3 hours 10 minutes

The female was also on the nestling tree for 8:46 am - 9:23 am = 37 minutes

Female was outside the nest for 9:23 am – 9:35 am = 12 minutes

The female was on the nest for 9:35 am – 9:46 am = 11 minutes

The female was on top of the tower for 9:46 am – 5:32 pm = 7 hours 14 minutes

Total time the Female was on the nestling tower for 37 minutes + 7 hours 14 minutes = 7 hours 51 minutes

Total time the female was outside the nestling tower for 12 minutes

The male was outside the nestling tower for 10:29 am – 12:27 pm = 1 hour 58 minutes

The male back without bringing anything at 12:27 pm

The male was outside the nestling tower for 1:33 pm – 2:12 pm = 39 minutes

The male again back without bringing anything at 2:12 pm

The male then left the tower for 2:15 pm – 3:13 pm = 58 minutes

The male brought a medium taki fish at 3:13 pm

Both male and female was on the nest for 3:13 pm – 3: 22 pm = 9 minutes

Female then perching the tower for 3:22 pm – 3:43 pm = 21 minutes

The male then left the tower for 3:43 pm – 5:32 pm = 2 hours 11 minutes

Total time male was outside from the nest for

1 hour 58 minutes + 39 minutes + 58 minutes + 2 hours 11 minutes = 5 hours 46 minutes

The male again brought a medium taki fish at 5:32 pm and it directly drop on the nest

Date: 09/03/19

Place: Manik khila

Both male and female was on the nestling tree for 7:50 am – 11:02 am = 3 hours 12 minutes

Both male and female were outside the nestling tree for 11:02 am – 2:49 pm = 3 hours 47 minutes

Male was on the nestling tree for 7:50 am – 11:02 am = 3 hours 12 minutes

Male was on the nestling tree again 2:49 pm – 3:12 pm = 23 minutes

Total time Male was on the nestling tree for = 3 hours 35 minutes

Male was outside the nestling tree for 11:02 am – 2:49 pm = 3 hours 47 minutes

Male was outside from the nestling tree for 3:12 pm – 5:22 pm = 2 hours 10 minutes

Total time the Male was outside the nestling tree for = 5 hours 57 minutes

Female was beside the nestling tree for 7:50 am – 11:02 am = 3 hours 12 minutes

The female then was beside the nestling tree for 2:49 pm – 3:12 pm = 23 minutes

Total time the female was beside the nestling tree for 3 hours 35 minutes

Female was outside the nestling tree for 11:02 am – 2:49 pm = 3 hours 47 minutes

Female was outside the nestling tree for 3:12 pm – 3:34 pm = 24 minutes

Again the female was outside again from the nestling tree for 3:12 pm – 5:09 pm = 1 hour 57 minutes

Total time the female was outside the nestling tree for 3 hours 47 minutes + 24 minutes + 1 hour 57 minutes = 6 hours 8 minutes = 6 hours 08 minutes

The female back without bringing any fish.

Both male and female was outside again from the nestling tree for 3:12 pm – 5:09 pm = 1 hour 57 minutes

The male brought a small goinna fish at 5:22 pm

Date: 11/03/19

Place: Makhordi

The male was outside the nestling tree for 9:20 am – 11:07 am = 1 hour 47 minutes

One mouse was brought by the male at 11:07 am

Both male and female were outside the nestling tree for 12:12 pm – 1:42 pm = 1 hour 30 minutes

The female was on the nestling tree for 1:42 pm – 3:56 pm = 2 hours 14 minutes

The chicks always started flying flapping their wings perching on a tree.

The male was outside the nestling tree for 2:38 pm – 5:30 pm = 2 hours 52 minutes

Male brought frog at 5:30 pm

The female was outside the nestling tree for 3:56 pm – 4:23 pm = 27 minutes

One frog was brought by female at 4:23 pm

The female was on the nestling tree for 4:23 pm – 6:00 pm = 1 hour 37 minutes

Two chicks were outside the nestling tree for 11:13 pm – 5:34 pm = 6 hours 21 minutes

Date: 12/03/19

Place: Makhordi

The chick firstly came out from nest on 01/03/19, and their first fly was on 12/03/19.

Date: 12/03/19

Place: Manik khila

Both male and female were outside the nestling tree for 10:00 am – 4:52 pm = 6 hours 52 minutes

Female was outside the nestling tree for 10:00 am – 4:52 pm = 6 hours 52 minutes

The female back without bringing anything at 4:52 pm

Both chicks were outside the nest for 10:00 am – 11:09 am = 1 hour 9 minutes

One chick was just outside from the nest for 11:09 am – 1:16 pm =

The chick was inside the nest for 1:16 pm – 1:42 pm

The chick then outside the nest for 1:42 pm – 4:46 pm

One adult possibly female back and on the nestling tree for 4:52 pm – 6:00 pm = 1 hour 8 minutes

The male was outside the nestling tree for 10:00 am – 5:19 pm = 7 hours 19 minutes

Male was on the nestling tree for 5:19 pm – 6:00 pm = 41 minutes

Date: 12/03/19

Place: Makhordi

Male was beside the nestling tree for 10:32 am – 10:54 am = 22 minutes

The male was beside the nestling tree for 1:51 pm – 3:27 pm = 1 hour 36 minutes

Total time the male was beside the nestling tree for = 1 hour 58 minutes

Male was outside the nestling tree for 10:54 am – 1:51 pm = 2 hours 57 minutes

The male was again outside the nestling tree for 3:27 pm – 5:38 pm = 2 hours 11 minutes

Total time the male was outside the nestling tree for = 5 hours 8 minutes

Male brought a goinna fish at 1:51 pm

Female was on the nestling tree for 10:32 am – 10:54 am = 22 minutes

The female was beside the nestling tree for 1:51 pm – 3:16 pm = 1 hour 25 minutes

The female was beside the nestling tree for 3:39 pm – 5:40 pm = 2 hours 1 minutes

Total time female was beside the nestling tree for 22 minutes + 1 hour 25 minutes + 2 hours 1 minute = 3 hours 48 minutes

Female was outside the nestling tree for 10:54 am – 1:51 pm = 2 hours 57 minutes

The female back without bringing anything at 1:51 pm

The female was outside the nestling tree for 3:16 pm - 3:39 pm = 23 minutes

Total time female was outside the nestling tree for 2 hours 57 minutes + 23 minutes = 3 hours 20 minutes

The female brought a mouse at 3:39 pm

Date: 13/03/19

Place: Makhordi

2 juvenile left the nest for the first time on 12/03/19

Date: 13/03/19

Place: Makhordi

Male was outside the nestling tree for 10:04 am – 5:22 pm = 7 hours 18 minutes

The male bought a rat at 5:22 pm

Female was outside the nestling tree for

10:04 am - 11:20 am = 1 hour 16 minutes

11:47 pm – 3:43 pm = 3 hours 56 minutes

3:44 pm – 4:24 pm = 40 minutes

Total time Female was outside the nestling tree for = 5 hours 52 minutes

Female brought a shoal fish on 3:43 pm

Female was on the nestling tree for 11:20 am – 11:47 am = 27 minutes

Female was on the nestling tree for 4:24 pm – 5:22 pm = 58 minutes

Total time Female was beside the nestling tree for 1 hour 25 minutes

Date: 13/03/19

Place: Kamalpur

Male was outside the nestling tree for 9:12 am – 10:19 am = 1 hour 7 minutes

10:21 am – 11:12 am = 51 minutes

11:19 am – 2:11 pm = 2 hours 52 minutes

2:22 pm - 4:52 pm = 2 hours 30 minutes

Male was outside the nestling tree for 7 hours 20 minutes

The male bought Taki fish at 11:12 am and frog at 2:11 pm and mid-sized fish at 4:52 pm

Male was on the nestling tree for 10:19 am – 10:21 am = 2 minutes

Male was on the nestling tree for 11:12 am – 11:19 am = 7 minutes

Male was on the nestling tree for 2:11 pm – 2:22 pm = 11 minutes

Male was on the nestling tree for 4:52 pm – 5:22 pm = 30 minutes

Total time the Male was on the nestling tree for 50 minutes

Female was on the nestling tree for 9:56 pm – 10:13 pm = 17 minutes

Female was outside the nestling tree for 10:13 pm – 5:22 pm = 7 hours 9 minutes

Date: 15/03/19

Place: Ramsinghapur

The female was on the nestling tower for 8:50 am - 4:36 pm = 7 hours 46 minutes
The male was outside the nestling the tower for 8:50 am – 11:33 am = 2 hours 43 minutes
The male left the tower for 11:59 am – 1:18 pm = 1 hour 19 minutes
Male was then outside the nest for 11:36 am – 1:18 pm = 1 hour 42 minutes
The male again left the tower for 1:58 pm – 3:21 pm = 1 hour 19 minutes
The male then again left the tower for 3:28 pm – 4:36 pm = 1 hour 8 minutes
Total time Male was outside the nest for 8 hours 11 minutes

The male brought a twig with leaf at 11:33 am
The male was inside the nest for 11:33 pm – 11:36 pm
Then both male and female were perching on the nestling tower for 11:36 am – 11:59 am = 23 minutes
The male back at 1:18 pm and its left leg there was a frog
Male was on the nest for 1:18 pm – 1:58 pm = 40 minutes
The male brought green grass at 3:21 pm
The male then on the nestling tower for 3:21 pm -3:28 pm = 7 minutes
Total male the male was on the nestling tower for 23 minutes + 40 minutes + 7 minutes = 70 minutes = 1 hour 10 minutes
The male brought a frog with grass and mud in its right leg at 4:36 pm

Date: 19/03/19

Place: Bishara

The female was beside the nestling tree for 9:00 am – 10:23 am = 1 hour 23 minutes
female was beside the nestling tree for 4:02 pm – 6:19 pm = 2 hours 17 minutes
Total time female was beside the nestling tree for 3 hours 40 minutes

The male was beside the nestling tree for 3:38 pm – 3:47 pm = 9 minutes

The female was outside the nestling tree for 10:23 am – 4: 02 pm = 5 hours 39 minutes
The male was outside the nestling tree for 9:00 am – 3:38 pm = 6 hours 38 minutes
Male was outside the nestling tree for for 3:47 pm – 6:19 pm = 2 hours 32 minutes
Total time the male was outside the nestling tree for 9 hour 10 minutes

One frog which screaming sound was heard clearly *chi- chi-chi* was brought by an adult female at 3:38 pm
One juvenile left the nest before 9:00 am and perched a tree from ground at 2:38 pm – 4:12 pm and finally back to nest on 4:12 pm
Another juvenile left the nest for the first time at 3:32 pm and was outside for 4:16 pm
The third juvenile was on the nest in the whole day

Date: 21/03/19

Place: Ramsinghapur

Female was top of the tower for 10:00 am – 11:27 am = 1 hour 27 minutes
Female was on the top of the tower for 12:39 pm – 1:01 pm = 22 minutes
Female perching on top of the tower for 1:10 pm – 5:38 pm = 4 hours 28 minutes

Total time female was on top of the tower for 6 hours 17 minutes

Female was outside of the tower for 11:27 pm – 12:39 pm = 1 hour 12 minutes

Female left the tower for 1:01 pm – 1:10 pm = 9 minutes

Male was outside the nestling tower for 10:03 am – 11:39 am = 1 hour 36 minutes

Male again left the nestling tower for 1:11 pm – 2:52 pm = 1 hour 41 minutes

Male was outside the nest for 3:26 pm – 3:51 pm = 25 minutes

Male again left the tower for 4:07 pm – 4:41 pm = 34 minutes

Again male left the tower for 5:20 pm – 5:38 pm = 18 minutes

Total time male was outside the tower for 4 hours 34 minutes

The male brought a frog on 11:39 pm

Male was on the nestling tower for 11:39 pm – 1:11 pm = 1 hour 32 minutes

Male was on the nestling tower for 2:52 pm – 3:26 pm = 34 minutes

Male was again in the nestling tower for 4:41 pm – 5:20 pm = 39 minutes

Total time male was on the nestling tower for 2 hours 45 minutes

Male brought a frog at 2:52 pm

Female feed the juvenile inside the nest for 2:52 pm – 2:58 pm = 6 minutes

Female also feed herself for perching on top of the tower for 2:58 pm – 3:07 pm = 9 minutes

Male brought a small chick of goose in nest at 3:51 pm

The male feed the chick of goose also itself after the leftover the juveniles from the nest for 4:07 pm – 4:07 pm, the male also feed the female twice

Male brought rice grass in the nest

Female also inside the nest for feeding 3:42 pm – 3:51 pm

Date: 22/03/19

Place: Ramsinghapur

Male was outside the tower for 10:08 am – 11:39 pm = 1 hour 31 minutes

Male left the tower for 12:49 pm – 3:51 pm = 3 hours 2 minutes

Male again left the tower for 4:20 pm – 5:38 pm = 1 hour 18 minutes

Total time the male was outside the tower for 5 hours 51 minutes

Male was on top of the tower for 11:39 pm – 12:49 pm = 1 hour 10 minutes

Male was on the nestling tower for 3:51 pm – 4:20 pm = 29 minutes

Total time male was on top of the tower for 1 hour 39 minutes

The male brought a goanna fish at 11:39 pm

Male brought a frog at 2:52 pm

Male brought a small chick of domestic duck at 3:51 pm

Female was perching on top of the tower for 10:08 am - 11:27 am = 19 minutes

Female was on top of the tower for 12:39 pm – 1:01 pm = 22 minutes

Female again perched on top of the tower for 1:10 pm – 5:38 pm = 4 hours 28 minutes

Total time the female was top of the tower for 5 hours 9 minutes

Female went out for 11:27 am – 12:39 pm = 1 hour 12 minutes

Female left the tower for 1:01 pm -1:10 pm = 9 minutes

Total time female was outside the tower for 1 hour 21 minutes

Female was inside the nest for 3:42 pm – 3: 51 pm = 9 minutes

Female feed the young for 2:52 pm – 2:58 pm = 6 minutes

The female also feed herself for by taking the remaining part on top of the tower for 2:58 pm – 3:07 pm = 9 minutes

Female again inside the nest for 3:42 pm -3:51 pm = 9 minutes

The male also brought a chick of domestic duck at 3:51 pm and feed the male by himself firstly

For 3:51 pm – 4:02 pm = 11 minutes

Then it brought in the nest to feed the juvenile for 4:02 pm - 4:07 pm = 5 minutes

Male again took the remaining part of the chick of domestic duck on top of the tower for 4:07 pm – 4:20 pm = 13 minutes

Male brought a rice grass at 4:20 pm

Male feed twice when the female was just beside it.

Male brought a only a twig at 5:38 pm in the nest.

Date: 23/03/19

Place: Ramsinghapur

Male was outside the nestling tower for 9:43 am – 12:38 pm = 2 hours 55 minutes

The male was out of the tower for 12:49 pm – 5:14 pm = 4 hours 25 minutes

Male again went outside for 5:14 pm – 5:57 pm = 43 minutes

Total time male was outside the tower for 8 hours 3 minutes

Male back the tower 12:38 pm without bringing anything

The male was on top of the tower for 12:38 pm – 12:49 pm = 11 minutes

Male back the tower at 5:14 pm by bringing a frog at 5:14 pm

Male brought a frog at 5:57 in the nest

Female was outside the tower for 9:43 am – 12:33 pm = 2 hours 50 minutes

Again the female was searching prey in the adjacent field for 1:15 pm – 2:31 pm = 1 hour 16 minutes

The female also again went outside for 2:31 pm – 3:10 pm = 39 minutes

Female again went outside for 4:50 am – 5:14 pm = 24 minutes

Total time the female was outside the tower for 5 hours 9 minutes

Female was on the tower for 12:33 pm – 1:15 pm = 42 minutes

The female then perched the top of the tower for 3:10 pm – 4:50 pm = 1 hour 40 minutes

Female was on the tower for 5:14 pm – 5:57 pm = 43 minutes

Total time the female was on top of the tower for 3 hours 25 minutes

Female tried to catch fish just beside the river for 1:15 pm – 1:21 pm = 6 minutes
The female brought a small goinna fish at 3:05 pm
The female feed the juvenile for 3:05 pm – 3:10 pm = 5 minutes

Date: 24/03/19

Place: Ramsinghapur

Male was outside the nestling tree for 9:20 am – 10:18 am = 58 minutes
Male was outside the tower for 10:41 am – 10:53 am = 12 minutes
Male was outside the nest for 11:44 am – 11:57 am = 13 minutes
Male was outside the tower for 11:57 am – 2:43 pm = 2 hours 46 minutes
Male was outside the tower for 3:11 pm – 5:31 pm = 2 hours 20 minutes
Male was perching on the tower for 10:18 am – 10:41 am = 23 minutes
Male feed the fish for 10:53 am – 11:03 am = 10 minutes
Male brought fish in mouth and brought the fish in nest for juvenile for 11:03 am – 11:07 am = 4 minutes
Male was on top of the tower for 11:08 am – 11:44 am = 36 minutes
Male brought a taki fish at 2:43 pm and brought indife nest and feed juvenile for 2:43 pm – 2:51 pm
Then male was on the tower for 2:51 pm – 3:11 pm = 20 minutes
Male was on the nest for 5:31 pm – 5:56 pm = 25 minutes
The male brought a frog at 10:18 am
Male feed the juvenile for 10:18 am – 10:41 am = 23 minutes
Female was on the tower for 9:20 am – 11:57 am = 2 hours 37 minutes
Female was on the tower for 1:57 pm – 3:53 pm = 1 hour 56 minutes
Total time female was beside the nestling tower for 4 hours 33 minutes

Male brought a goinna fish at 10:53 am
Female feed herself the remaining part of the fish for 11:07 am – 11:11 am = 4 minutes
Female was outside the tower for 11:57 am – 1:57 pm = 2 hours
Female was outside the tower for 3:53 pm – 4:12 pm = 19 minutes
Female left the tower again 4:12 pm – 6:20 pm = 2 hours 8 minutes
Total time the female was outside the tower for 4 hours 27 minutes

Post Fledging

Date: 18/03/19

Place: Makhordi

One juvenile was on the ground for 10:00 am – 11:13 am then separate and was on the ground for 11:13 am – 1:25 pm again on ground and soaring for 1:25 pm – 1:56 pm, after soaring it perched on the same tree for 1:56 pm – 2:42 pm then on the ground for 2:42 pm – 3:05 pm then perching an adjacent tree for 3:05 pm – 3:25 pm and then went to graveyard perching tree there for 3:25 pm

Another juvenile was on the ground for 10:00 am – 11:55 am and perched tree for 11:55 am – 1:32 pm then again sit ground for 1:32 pm – 4:22 pm
Another juvenile perched in a tree in grave yard for 3:10 pm – 3:33 pm
One adult was also perching tree with other juveniles 12:09 pm – 3:16 pm
Another adult join with other adult at 12:59 pm with a fish for 12:59 pm – 3:16 pm
Both two adults were outside for 3:16 pm – 5:39 pm
One mouse was caught and brought to feed juveniles by females at 3:44 pm and again the male brought a gonia fish at 5:39 pm
2 juveniles and one adult back to the nest and 1 juvenile and 1 adult were in the graveyard.

Date: 25/03/19

Place: Makhordi

Female was perching tree for 10:12 am – 12:02 pm
Male was outside for 10:12 am – 5:58 pm
Female was searching prey for 12:02 pm – 2:38 pm
Female feed a juvenile a frog for 2:38 pm – 2:56 pm
2 juvenile was on the ground for 10:12 am -11:23 am
2 juvenile then perching tree for 11:23 pm – 12:24 pm
Another juvenile was on the ground for 10:12 am – 12:25 pm

Date: 08/04/19

Place: Makhordi

Three juvenile is found on the ground for 9:30 am – 11:14 am around 1.5 km away from the nest
Both male and female wasn't seen for 9:30 am – 2:07 pm
3 juvenile separate then and 1 juvenile then sit on the ground for 11:14 am – 12:02 pm
The juvenile then went to near the nestling tree and perched there for 12:02 am – 2:22 pm
The juvenile then perched the tree of graveyard for 2:22 pm – 6:32 pm
Another 2 juvenile also on the ground for 11:14 am – 1:43 pm
Then 1 juvenile perched tree on in graveyard for 1:43 pm – 6:32 pm
Another juvenile perched a Koroch tree in the open field for 2:07 pm – 5:39 pm
The juvenile then perching on the graveyard for 5:39 pm – 6:32 pm
Another juvenile left from graveyard for 3:09 pm – 4:22 pm
The juvenile then was on ground for 4:22 pm - 5:17 pm
Then the juvenile come back to the grave yard for 5:17 pm – 6:32 pm
The female came back from the haor and didn't brought anything in its leg at 2:07 pm also perched tree in a koroch tree with one juvenile for 2:07 pm – 3:22 pm
The female also left the koroch tree for 3:22 pm – 6:17 pm and perched on the nestling tree for night roosting.
Male went to the haor basin for 9:30 am – 2:07 pm
Male back from the haor basin at 2:07 pm without bringing anything
The male with 2 juveniles was perching tree in the graveyard for 2:07 pm – 2:57 pm
The male then went to the haor for 2:57 pm – 6:32 pm and the male back at 6:32 pm without bringing anything.

Date: 09/04/19

Place: Manikkhila

It was raining from 8:30 am - 12:30 pm so it is assumed that the adult didn't go to the water body for prey catching while it was raining.

Both male and female were outside the nestling tree for 1:00 pm – 5:41 pm and 1:00 pm – 5:51 pm

One juvenile was found soaring for 3:07 pm – 3:32 pm

Another juvenile is found soaring for 4:07 pm – 4:58 pm

1 juvenile was outside the nestling tree for 1:00 pm – 5:48 pm

One adult was found soaring for 3:37 pm – 3:53 pm

Date: 10/04/19

Place: Bishara

3 juveniles were found on the ground for 9:09 pm – 11:47 pm

1 juvenile separated and perched on another tree for 12:47 pm

One small duck has been brought by an adult at 11:47 am. 3 juveniles joined with the adult from another tree and fed for 11:47 am – 12:02 pm

The adult then went away again for prey collection for 12:13 pm –

3 juveniles perched in a single tree for 12:02 pm – 12:47 pm; 2 juveniles perched in a same tree for 12:47 pm – 6:29 pm and at 6:29 pm two juveniles back to the nestling tree

Then one juvenile perched in another tree for 12:47 pm – 6:22 pm and at 6:22 pm back to the nestling tree

The adult brought another chick of duck at 12:55 pm and fed 3 juveniles for 12:55 pm – 12:58 pm

Two adults have been soaring for 1:18 pm – 1:56 pm

The adult then again left for 12:58 pm – 3:05 pm

The adult again brought a chick of duck at 3:05 pm and fed for 3:05 pm – 3:07 pm

Date: 10/04/19

Place: Manik khila

One adult was seen in a beel (large water body) with a fish at 11:06 pm

One juvenile was soaring just top of the nestling tree for 12:10 pm – 3:05 pm

The adult and one juvenile were perching in an electric pillar and the adult fed the juvenile some unknown food item for 4:03 pm – 4:05 pm

The adult was on the pillar again for 4:03 pm – 4:15 pm and fed (unknown item) the juvenile at 4:03 pm

And the juvenile was on the pillar for 4:03 pm - 4:16 pm

Both adult and juvenile left the pillar toward the haor basin

Both adult and also the juvenile were found back to the nestling tree at 6:05 pm

Remark: It was found when the juvenile back to the nest then a domestic duck farm was seen and the juvenile was looking at the domestic duck from the top for a while.

Date: 11/04/19

Place: Bishara

2 juveniles was perching tree for 9:00 am – 11:58 pm

The adult brought a food item (unknown) at 11:58 pm and feed for 11:58 pm – 12:00 pm

2 juvenile also came down on the ground to feed for when the adult male brought food at 11:58 am

1 juvenile was on the ground for 9:30 am – 12:29 pm

3 juveniles was feed for for 11:58 pm – 12:00 pm

3 juveniles then soaring for 12:30 pm – 12:37 pm

Again 3 juveniles on the ground for 12:38 pm – 1: 10 pm

Again 3 juveniles together soaring for 1:10 pm – 1:32 pm

The male brought an chick of domestic duck at 2:07 pm and feed for 2:07 pm 2:10 pm

Again the male brought a mouse at 2:29 pm and feed for 2:29 pm – 2:30 pm

Then 2 juveniles perched in the nestling tree for 1:32 pm – 6:27 pm

1 juvenile was perching tree after from the soaring for 12:37 pm – 6:27 pm

Two adult was seen perching in a tree for 4:09 pm – 4:42 pm

The male was outside for 9:30 am – 11:58 pm, 12:00 pm – 2:07 pm, 2:10 pm -2:29 pm

The male was on the nestling tree for 4:42 pm – 6:27 pm

Remark: One adult possibly the female was died on 10/03/19 or 11/03/19 and on 19/03/19 it was found once that both the male and female was seen together just top of the nest although another adult didn't roost night at the nestling tree. Only one adult was roosted with 3 juveniles on that day. On 11/04/19 the female and male was seen together perching in a same tree for 4:09 pm – 4:42 pm

Date: 11/04/19

Place: Datia para

Both male and female was on the nestling tree for 10:35 am – 11:02 am

The female back to the nest with one juvenile and stay in the nestling tree for at 5:14 pm – 5:16 pm

Both the female and juvenile was outside the nestling tree for 5:16 pm – 6:03 pm

Both male and female with one juvenile back to the nest at 6:03 pm

Date: 12/04/19

Place: Manik khila

Both two adult and one juvenile weren't seen for 9:30 pm - 2:38 pm

Both two adult and one juvenile was seen in a beel where they were soaring for 2:38 pm – 3:19 pm

Both male and female with juvenile back to the nest at 6:17 pm

Date: 12/04/19

Place: Datia para

One juvenile was in the nestling tree for 10:40 am – 11:17 am

The juvenile was soaring in the sky for 11:17 pm – 12:50 pm

The juvenile then soaring was sitting on the ground, 1 km away from the nest for 12:50 pm

Date: 13/04/19

Place: Datia para

The female was on the nestling tree for 10:22 am – 1:15 pm

The juvenile was on the ground for 10:22 am - 11:01 am

The juvenile was outside the nestling tree for 11:01 am – 12:25 pm

The juvenile was soaring on the sky for 12:25 pm – 2:20 pm

The male was outside the nestling tree for 10:22 am – 2:20 pm

The male, female and juvenile was on the nestling tree for 2:20 pm – 3:01 pm

The male then went outside for 3:01 pm – 3:44 pm

The male brought anything?

The male were on the nestling tree for 3:44 pm - 4:02 pm

The male again went outside for 4:02 pm – 5:11 pm

The juvenile with male and female was on the nestling tree at 5:17 pm

Date: 13/04/19

Place: Ghashi

The female was on the nestling tree for 9:00 am – 10:58 am

The juvenile was perching a tree for 9:00 am – 10:58 am

One juvenile was soaring with female 10:58 am – 12:22 pm

The female also soaring for 10:58 am – 1:47 pm

The juvenile then perched in the nestling tree for 12:22 pm – 12:33 pm

The female was also perching in the nestling tree for 1:47 pm – 2:58 pm

The female left the nestling tree firstly toward Bain chapra haor then went tangua haor for 2:58 pm – 4:37 pm

Both male and female back together and perched in a tree on the other side of Ghashi river for 4:37 pm – 6:14 pm

The juvenile went toward haor basin for 12:33 pm – 1:52 pm

The juvenile came again in the nestling tree for 1:52 pm – 6:14 pm

The male was in the tangua haor area for 9:00 am – 4:37 pm

Remark: The juvenile start soaring in the sky possibly this is the first step of hunting. The juvenile first look for whether any prey item exists or not in the ground.

Date: 13/04/19

Place: Makhordi

The female is perching a tree in the grave yard for 9:30 am – 11:22 am

The female left the haor for 11:22 am – 12: 23 pm

The female was on the nestling tree for 12:22 pm – 1:44 pm

Male was outside for 9:30 am – 3:46 pm

The male came back without bringing any fish at 3:46 pm and again went outside toward Kolma beel

One juvenile on the ground for 9:30 am – 2:16 pm

4 juveniles perching a tree on the grave yard for 2:22 pm – 4:54 pm

One juvenile left their perching tree and soaring in the field for 12:41 pm – 2:22 pm
One juvenile left the perching tree in the grave yard and soaring in the sky for 4:57 pm – 6:30 pm and back to the grave yard tree at 6:30 pm
One juvenile back to the nestling tree at 6:17 pm and then again back to the grave yard for night roosting and perched in a tree at 6:20 pm

Date: 13/04/19

Place: Ramsingha pur

The male was outside the tower for 9:06 am – 10:03 am
The male brought a goinna fish at 10:03 am
The juvenile also came out from the nest while it see that male was coming nest with fish at 10:03 am
The male was on the nest on tower feeding juvenile for 10:03 pm – 10:16 pm
The male then left the tower for 10:16 pm – 5:56 pm
The male came back at 10:56 pm and brought a fish (unknown) at 5:56 pm

The female was outside the nestling tower for 9:06 am – 12:03 pm
The female then perched on top of the tower for 12:03 pm – 3:02 pm
The female went outside from the tower for 3:11 pm – 3:15 pm
The female again perching on top of the tower for 3:15 pm – 5:56 pm

Date: 15/04/19

Place: Makhordi

The female was perching on the tree in the grave yard for 9:30 am – 11:22 am
The female left the tree in the grave yard for 11:22 am – 12:24 pm
Female was on the nestling tree for 12:24 pm – 1:47 pm
Female was outside for 1:47 pm –
1 juvenile left the perching tree and soaring in the field for 12:41 pm – 2:22 pm
Another juvenile on the ground for 9:30 am – 2:16 pm
4 juvenile was perching tree on the grave yard for 2:22 pm – 4:54 pm in the grave yard for 4:54 pm – 6:30 pm and back to the grave yard again 6:30 pm
1 juvenile left the perching tree
The male came once without bringing anything at 3:46 pm and again went toward kolma beel

Date: 15/04/19

Place: Ghashi

2 juveniles and 1 female was soaring on the sky for 11:00 am – 1:10 pm
Male and female with 2 juveniles perching in the nestling tree for 1:10 pm – 2:36 pm
2 juveniles was sitting on the ground for 2:36 pm – 3:25 pm
The male brought a chick of duck at 3:25 pm and brought feed that to the juveniles for 3:25 pm – 4:42 pm
The male was then again outside fro 4:42 pm – 5:33 pm
The male and female with 2 juveniles was perching beside the nestling tree since 5:33 pm

1st Week Date: 01/03/19 – 01/03/19 - 11/03/9	2 nd Week Date: 08/03/19 – 12/03/9 -	3 rd Week Date: 15/03/19 – 21/03/19	4 th Week Date: 22/03/19 – 28/03/19	5 th Week
1 feet. Just beside the nest by two chicks. Another chick was on the nestling tree.	Graveyard	Graveyard	After crossing the Kolma beel	

Date:

Place: Makhordi

1st Week Date: 01/03/19 – 01/03/19 - 11/03/9	2 nd Week Date: 08/03/19 – 12/03/9 -	3 rd Week Date: 15/03/19 – 21/03/19	4 th Week Date: 22/03/19 – 28/03/19	5 th Week
1 feet. Just beside the nest by two chicks. Another chick was on the nestling tree.	Graveyard			

Date: 19/03/19

Place: Bishara

1st Week Date: 01/03/19 – 01/03/19 - 11/03/9	2 nd Week Date: 08/03/19 – 12/03/9 -	3 rd Week Date: 15/03/19 – 21/03/19	4 th Week Date: 22/03/19 – 28/03/19	5 th Week
20 feet				

Date:

Place: Manik khila

1st Week Date: 01/03/19 – 01/03/19 - 11/03/9	2 nd Week Date: 08/03/19 – 12/03/9 -	3 rd Week Date: 15/03/19 – 21/03/19	4 th Week Date: 22/03/19 – 28/03/19	5 th Week
2 feet	100 feet			

Remarks:

08/04/19: It is found when both male and female back from haor at 2:07 pm then one juvenile came from the graveyard which was perching a tree in the graveyard try to catch the leg of female possibly to take fish from the female but both male and female didn't bring any fish,or frog.

Threats of Pallas's Fish Eagle

1. Cutting down the nestling trees

Out of 20 old nests in tahirpur which has been no more exists has been disappeared because of cut down the nestling trees for 10 nests. In the sub-district of jamalganj out of 28 old or previous nests in jamalganj 11 nests has been disappeared since cut down the nestling trees and out of 26 old or previous nests in Dharmapasha 19 nests has been disappeared for cut down the nestling's trees.

2. Breaking down the nestling tree

Out of 20 old nests in tahirpur which has been no more exists has been disappeared because of tree broken for 7 nests. Out of 28 old or previous nests in jamalganj tree broken for 12 nests and out of 26 old or previous nests in Dharmapasha 6 nests has been disappeared for broken down the nestlings.

3. Infertility of the eggs

This year I observed one pair which incubates for 58 days but the pair late didn't incubates its any eggs and another pair incubates for 101 days and later that pair also didn't hatch the eggs and no chick get out from the any eggs. So, infertility of egg means there are some causes happens which decreases the breeding success of Pallas's Fish Eagle which ultimately shrink down the population.

4. Food unavailability

The scarcity of fish is another threat of Pallas's Fish Eagle and in my direct observations I found most of the case the adult specially the male brought most of the time the *Boggut labeo* fish which is common.

5. Conflict with local people

Human-Pallas's Fish Eagle conflict is another threat for surviving of Pallas's Fish Eagle in north-east Bangladesh. Earlier in every villages of Sunamganj considered Pallas's Fish Eagle a part of their daily life, even they admitted they used to go in the crop field after hearing the call of this eagle and a greater part of Sunamganj called in their native language *Hawal* which means guard that means people considered Pallas's Eagle as a guard which let them know the time and which task have to do on particular time. But now surrounding people of most of the nest reported that Pallas's Fish Eagle

frequently hunt domestic duck and this year three nests (The nests of Ghashi, Sunoi, Protipur) were found broken or burn by local people.

6. Spread out urbanization

At least 4 pairs are directly surviving this threat in Sunamganj sadar sub-district of this threat where urbanization directly poses habitat destructin of Pallas's Fish Eagle there. These 4 pairs are in sadokpur, srinathpur, hason nagar and kolaura villages in Sunamganj sadar sub-district.

7. No nest beside the nestling tree of Pallas's Fish Eagle

Single nestling trees (That means no trees except the nestling tree of Pallas's Fish Eagle) are great threat to some pair because if those nestling trees are cut down or broken then there is very strong possibilities to left out that area of that pair of Pallas's Fish Eagle (because if there is no mature tree isn't available in that case eagle left that place forever). The nestling tree of Kamalpur, Manik khila and Gajadispur in Tahirpur sub-district, Milik kalamborpur in Gajananthpur sub-district, Solof in South Sunamganj sub-district are example of single nestling trees where no trees exists except the nestling tree of Pallas's Fish Eagle.

8. No new nest was found

No new nests was found although every years some juveniles Pallas's Fish Eagle has been added to the global population but no new nests was found by any newly formed pair and the reasons is still unknown.

9. Making earth embankment beside the river system

The local government frequently making earth embankment to save the crops from early flood which poses the shrink down the depth of the river systems because when water of the rainy season came it broke all the embankments and the soil of those embankments directly fill down the river.

10. Lack of Mature and old trees

Since there are lacks of mature trees Pallas's Fish Eagle is making nest on the mobile pylon. ramsinghapur in Tahirpur, chechen in Chatak and sikondorpur in Dirai are three nests of Pallas's Fish Eagle where they makes nest in mobile pylon very recent years not for finding enough mature trees.