#### <u>Report</u>

#### <u>of</u>

# Observation on behavior of Common crane after treatment and before release

(03/12/2019 to 13/12/2019)

Submitted by Mr. Ronak Maradiya (M.Sc. Zoology, Semester-II)

Report compiled with inputs and guidance from Dr. Rupal Vasant and Prof. Ujjval Trivedi

> Submitted to P.G. Department of Biosciences Sardar Patel University Vallabh Vidyanagar

**Observation on behaviour of bird after treatment and before release .** 

### 4<sup>th</sup> December , 2019

### Common crane (Grus grus)

### Abstract :-

The behaviour of common crane was studied in captivity for checking their post treatment and pre release fitness. One common crane after treatment were kept in small aviary or enclosure for two consecutive days for 12 hours daily three periods.

The order of observation of behaviour of bird was performed randomly at every thirty minutes. There was statistical difference between morning and noon behaviour.

### Introduction and identification :-

Common crane is also known as Eurasian crane. Crane is a large ,stately bird and a medium sized crane. It is 50 inch long, 100 inch wing span, 7 kg weight .

This species is slate-grey overall. The forehead and lore's are blackish with streak extending from behind the eyes to upper back .

The overall color is darkest on the back and rump and palest on the breast and wing .

Birds were rescued From the sambhar lake, The Sambhar salt Lake, India's largest inland salt lake, is located 80 km (50 mi) southwest of the city of Jaipur and 64 km (40 mi) northeast of Ajmer, Rajasthan. It surrounds the historical Sambhar Lake Town. Reason was Avian Botulism is a strain of botulism that affects wild and captive bird populations, most notably waterfowl. This is a paralytic disease brought on by Botulinum neurotoxin of the bacterium clostridium botulinum. after rescue birds were treated by the veterans at Kachroda nursery. Then they were kept in a small aviary for two days for observation of pre-release fitness of the birds. For two consecutive days (4th & 5th december, 2019)

#### Manner of cage :-

One common crane kept in an outer cage 12 ft.  $\times$ 12 ft. The cage was cover by green transparent net. Inside the cage one small pot hole field with water.

#### **Diet provided :-**

The mixture of bajra seed, wheat, green grams and spinach was provided to it.

### Method :-

For pre release observation :- we observed several following behaviour like walking , preening , foragine, flapping , seating in hook position , walking speed.

Observation on behaviour were made for two consecutive days and three different time periods in a day .

Morning :- 8.00 AM to 12.00 Afternoon :- 12.00 to 4.00 PM

Evening :- 4.00 PM to 8.00 PM

**For post release observation :-** For checking post release behaviour and conditions we visited realising site for two consecutive days.



Pre release behaviour



Post release behaviour

## Observation table :-

DAY 1 (dt. 04/12/2019)					
Sr. no.	Time Activities observed				
	MORNING				
1	8.00 - 8.30	walking			
2	8.30 - 9.00	feeding (1st meal)			
3	9.00-9.30	standing in water			
4	9.30-10.00	walking			
5	10.00-10.30	walking			
6	10.30-11.00	foragine			
7	11.00-11.30	standing out of water			
8	11.30-12.00	standing out of water and flapping			
AFTERNOON					
9	12.00-12.30	feeding ( 2ed meal )			
10	12.30-1.00	walking			
11	1.00-1.30	walking			
12	1.30-2.00	foragine			
13	2.00-2.30	standing out of water			
14	2.30-3.00	walking			
15	3.00-3.30	standing out of water and flapping			
16	3.30-4.00	walking			
	EVENING				
17	4.00-4.30	feeding ( 3rd meal )			
18	4.30-5.00	walking			
19	5.00-5.30	standing out of water			
20	5.30-6.00	standing out of water and flapping			
21	6.00-6.30	foragine			

22	6.30-7.00	walking
23	7.00-7.30	walking
24	7.30-8.00	feeding (4th meal)

•

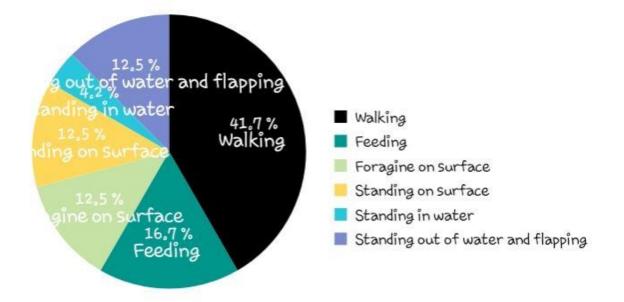
Day:- 2 (dt.05/12/2019)				
Sr. no. Time Activities observed				
MORNING				
1	8.00 - 8.30	Fast walking		
2	8.30 - 9.00	feeding (1st meal)		
3	9.00-9.30	foragine in the water		
4	9.30-10.00	standing out of water and preening		
5	10.00-10.30	seating in hock position		
6	10.30-11.00	foragine on the surface		
7	11.00-11.30	standing out of water and preening		
8	11.30-12.00	fast walking		
	1	AFTERNOON		
9	12.00-12.30	feeding ( 2ed meal )		
10	12.30-1.00	foragine on the surface		
11	1.00-1.30	walking		
12	1.30-2.00	standing out of water and preening		
13	2.00-2.30	foragine in the water		
14	2.30-3.00	walking		
15	3.00-3.30	standing out of water and preening		
16	3.30-4.00	walking		
	1	EVENING		
17	4.00-4.30	feeding ( 3rd meal )		
18	4.30-5.00	fast walking		
19	5.00-5.30	foragine on the surface		
20	5.30-6.00	standing out of water and flapping		

21	6.00-6.30	walking
22	6.30-7.00	standing out of water and flapping
23	7.00-7.30	walking
24	7.30-8.00	feeding ( 4th meal )

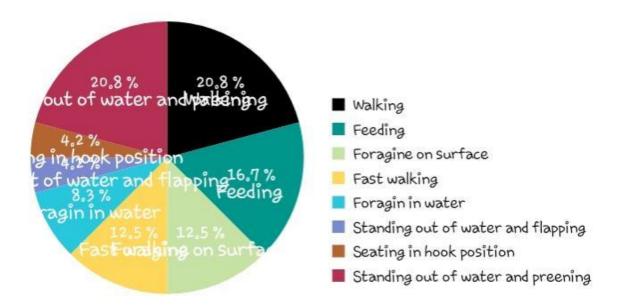
## Result :-

DAY 1 RESULT		
sr.no.	Activity	Time
1	Walking	5 hours
2	feeding	2 hours
3	foragine on surface	1.5 hours
4	standing in water	0.5 hours
5	standing out of water	1.5 hours
6	standing out of water and flapping	1.5 hours

	DAY 2 RESULT			
sr.no.	Activity	Time		
1	Walking	2.5 hours		
2	fast walking	1.5 hours		
3	foragine on surface	1.5 hours		
4	foragine in water	1 hours		
5	feeding	2 hour		
6	standing out of water and flapping	0.5 hours		
7	standing out of water and preening	2.5 hours		



#### DAY 1 RESULT IN PIE CHART



#### DAY 2 RESULT IN PIE CHART

#### Inference :-

Result show that common crane spend time 20.8% in walking , 20.8% standing and preening , 4.2% in hock position , other time in foragine. These behaviour are more or less the same as observed in wild conditions as on observation and veterans call we released the birds into the ratan talab pond near sambhar lake in their natural environment .

#### Conclusion :-

Healthy walking , preening , foragine are some activities of crane which we can observed and declare it as fit to release . If the activities are good and frequent the birds in captivity are fit to release.

-RONAK N. MARADIYA