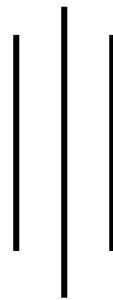


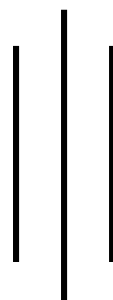
**POPULATION STATUS AND DISTRIBUTION
OF CATTLE EGRET (*Bubulcus ibis*)
IN KATHMANDU VALLEY**



A Dissertation Submitted in Partial Fulfillment of the
**Requirements for the
Master Degree in Zoology (Ecology)**



**By
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2008**

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Submitted to

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Kirtipur

2008

CENTRAL DEPARTMENT OF ZOOLOGY

TRIBHUVAN UNIVERSITY

Kirtipur, Kathmandu

Date:

RECOMENDATION

It is my pleasure to mention that **Mr. Rabindra Chaudhary** has carried out the Dissertation entitled “**Population Status and Distribution of Cattle Egret in Kathmandu Valley**” under my supervision and guidance. This is the candidate’s original work, which brings out useful information on the Cattle egret ecology. Hence, I recommend the dissertation be accepted for the partial fulfillment of the requirement for the Degree of Master’s of Science in Zoology (Ecology).

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APPROVAL

This dissertation submitted by **Mr. Rabindra Chaudhary** entitled “**Population Status and Distribution of Cattle Egret in Kathmandu Valley**” has been accepted as a partial fulfillment of Master’s Degree in Zoology Specializing in Ecology.

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ABSTRACT

The research work on “**Population status and distribution of Cattle Egret in Kathmandu Valley**” was carried out from 2003 to 2006 to estimate population status, distribution pattern of cattle egrets and to identify the tree species preferred for roosting and nesting. Distribution pattern of cattle egret in the valley was determined based on nesting and resting sites. Direct counting method was used to estimate population status. The number of tree species and the number of nest in each tree species was used to identify the tree species preferred for roosting and nesting.

A total of 1284 nests or breeding pair of cattle egret were found in five nesting sites. The distribution of cattle egret was uneven and clumped which were commonly seen in colonial birds. The major nesting sites were Sundarijal (534), Keshar Mahal (296), Hanumanghat (220), Indrayani Mandir (181) and Belukhel (53). Cattle Egret can even nest in colony in an urban area. The breeding success rate was 85.29% which showed that Cattle Egret has adopted itself with changing environment.

The height of nest varies from 4.17meters *Juniperus indica* to 10 meters *Ficus benghalensis*. The height of roost varies with height of trees. By number *Grevillia robusta* was mostly the tree species preferred for nesting while *Lisea monoptela*, *Wendlandia puberula* and *Ficus religiosa* is the least preferred species. By number of nests, *Ficus benghalensis* was the most trees species while *Palmyra spp* was the least preferred species among the trees species utilized for nest building. The day roosting depends upon the availability of food in their feeding grounds and the tree available near by. *Populus spp* was the most preferred tree species for roosting purpose.

The distribution of cattle egret shows that northern part of the valley was used for nesting purpose while southern part was used for roosting during cold season (after breeding season).

The existing nesting and roosting tree should be preserved and further new tree should be planted. Regular monitoring of cattle egret should be done to know their status in the urban areas.

CONTENTS

	Page
Title Page	I – II
Recommendation	III
Approval	IV
Acknowledgement	V
Contents	VI-VII
List of Table	VIII
List of Figure	VIII
List of Map	IX
Abstract	X
1. INTRODUCTION	1
1.1 Background	1
1.2 Statement of the Problems	5
1.3. Objectives	5
1.4 Rationale	5
1.5 Limitation	6
2. STUDY AREA	7
2.1 Physical Description	7
2.2 2.3 Geology and Soil	7
2.3 Water bodies	7
2.4 Climate	8
2.5 Flora	11
2.6 Fauna	12
3. METHODS	13
3.1 Reconnaissance	13
3.2 Equipments used	13
3.3 Field surveys	13
3.4 Distribution Pattern	13
3.5 Roosting and Nesting	13
3.6 Habitat preference	13
3.7 Questionary survey	14

3.8 Data analysis	14
3.8.1 Variance to Mean Ratio (S^2 / X)	14
3.8.2 Chi-Square test for goodness of fit (2)	14
3.8.3 Spatial Analysis	15
4. RESULT	16
4.1 Distribution	16
4.2 Population status	18
4.3 Habitat preference	21
5. DUSCUSSION	28
6. CONCLUSION	31
7. RECOMMENDATION	33
8. REFERENCE	34
9. ANNEXES	36

LIST OF TABLE

Table	Topic	Page
Table 1	Distribution of nesting sites	16
Table 2	The tree species preferred for night roosting at different location	18
Table 3	Number of nest recorded in three districts.	18
Table 4	Number of nests recorded in different nesting sites.	19
Table 5	Breeding success of <i>Bubulcus ibis</i> in Kosima tree at Hanumanghat, Bhaktapur district.	20
Table 6	Comparison of number of nest in Keshar Mahal in different year.	21
Table 7	Name and number of tree species preferred for building nests at different nesting	23
Table 8	Total crown cover, total and average basal area and average height of nests in each tree species.	24
Table 9	The tree species preferred for Day roosting at different places at Kathmandu valley.	26
Table 10	Night roosting sites recorded at Kathmandu valley	27
Table 11	The tree species preferred for night roosting at different Location.	27

LIST OF FIGURE

Figure	Topic	Page
Figure 1:	Monthly mean Air Maximum/Minimum Temperature (2001-2005) recorded at Kathmandu Airport, (2001-2006) Kathmandu Valley.	9
Figure 2:	Monthly Minimum and Maximum Relative Humidity (2001-2005)	10
Figure 3:	Monthly Precipitation (2001-2005)	11

LIST OF MAP

Maps	Topic	Page
Map 1:	Expanding range of Cattle Egret.	2
Map 2:	Nesting and roosting sites of Cattle Egret in Kathmandu Valley	17