

CHAPTER 14

ENVIRONMENTAL BIOLOGY

Doctoral Theses

129. ABDUL KALAM
Field Studies on the Ecology of Painted Stork Mycteria Leucocephala in the Delhi Region, with Special Emphasis on Foraging Ecology and Sexual Size Dimorphism.
Supervisor : Dr. A. J. Urfi
Th 15748

Abstract

Studies the foraging ecology and sexual size dimorphism of Painted Stork in the Delhi region during 2004-2006. It includes the general habitat characteristic and group foraging of the Painted Stork. During its breeding and non-breeding phases of adults and juvenile birds. It also studies the differences in the body size of male and female Painted Stork and differences in the body size of early and late nesting birds.

Contents

1. Introduction and literature review. 2. Study areas. 3. Methodology. 4. Results. 5. Discussion. 6. Conclusion and recommendation. 7. Bibliography and appendices.

130. ABHISHEK CHANDRA
Traditional Agrodiversity Management in a Central Himalayan Village Ecosystem.
Supervisors : Prof. P. Pardha Saradhi and Dr. K. S. Rao
Th 15749

Abstract

Investigates that agriculture is an important occupation of the hill area. Agrodiversity is maintained by the economically poor society with other income sources being mostly nondescript in nature for ensuring low dependency on market. The characteristics of agrodiversity management are the use of bullocks

for draught power, human energy as labour, crop residues as animal feed and animal waste mixed with forest litter as organic input to restore soil fertility levels.

Contents

1. General introduction. 2. Review of literature. 3. Traditional agrodiversity management. 4. Ecological and economic efficiency. 5. Impact of traditional manure on crop. 6. Biological yield of traditional pulses. 7. Summary and conclusions. 8. Bibliography.

131. MEGANATHAN (Thangarasu)
Field Studies on the Nesting Ecology of Painted Stork *Mycteria leucocephala* in the Delhi Region.
 Supervisor : Dr. A. J. Urfi
 Th 15750

Abstract

Studies the seasonal population changes, daily movement patterns, social interactions and foraging flights direction of Painted Stork at their nesting colonies in the Delhi region, including the colonization pattern and nest initiation of Painted Stork and the variations in clutch size, hatching success and fledgling success across different colonies and seasons. Also studies the variations in Daily Survival Rate (DSR), spatially (i.e. among different colonies) and temporally (both yearly variations and also variations in early and late nesters) role of various factors, impacting nesting success by employing program MARK, the factors causing egg and chick loss of Painted Stork populations in the Delhi Zoo and Sultanpur National Park.

Contents

1. Introduction. 2. Literature review. 3. Material and methods. 4. Results. 5. Discussion. 6. Conclusions. 7. Bibliography and appendices.