

Preface

An organism is best suited to its favourable environment. Understanding of life requires knowledge of the influences, which directly or indirectly affect the organisms. Hence, that sub-division of biology, which has as its special discourse, the study of interrelationship between the organisms and their environment, is called 'Ecology' which continues unabatedly to enjoy universal adoption of accepted designation. Although the terms Hexiology, Natural history, etc., are sometimes considered synonymous to ecology, Shelford considered ecology as the science of communities having, as its central principle, the interrelationships which exist between organisms and their environment.

Reproductive biology, in the last two decades has taken vast strides and has achieved new dimensions in its complexion and content. With the recent advent of biotechnology, the reproductive biology, which constitutes one of the important branches of life sciences, has made enormous progress. All the living creatures develop from the preexisting organisms and perform all the activities for their growth and maturity. But as none of the living creature is immortal, so the individuals do something for the continuity of their race. And the activity for the continuation of the race is called

'Reproduction'. In a large number of sexually reproducing animals there are two distinctly different kinds of individuals males and females. Sometimes, the same individual possesses the capacity to function as both male and female and such an animal is termed a bisexual or hermaphrodite which are rare among vertebrates save for hag fish and a few bony fishes having a hermaphrodite gonad.

This book has been presented within the framework of scientific discovery. Since, researchers in animal ecology and reproductive biology have made almost incredible strides in the recent past, consequently the existing concepts in the related fields have expanded. The text integrates the descriptive, experimental and biochemical approaches with a conceptual framework for the analysis of the data. This volume concentrates as putting across the basic principles of the subject as briefly and lucidly as possible, with the aid of carefully selected examples, some recent and other classics of the field with numerous diagrammatic illustrations. The aim is to enthuse the reader with this active and exciting area of research and to lay a solid foundation on which further study of its various facts may be based and the authors will consider themselves to be amply rewarded if this humble piece of work proves to be useful for those it is meant. Finally, we would always remain debtor to all our well-wishers for their blessings, without which this book series would not have come into existence.

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