

Ṣatpada

Our World Of Insects

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RISHI VALLEY EDUCATION CENTRE

Krishnamurti Foundation India

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Foreword

If a student is found looking out of the window rather than listening to the teacher, this would be a bad sign in a maths class but not necessarily so in a biology class! This is especially true in India where biology, which is supposed to be the study of living organisms, has been degraded into the study of preserved, dead specimens under the best of conditions, and into the study of caricatures drawn with a chalk on the blackboard in the worst of conditions. This has to change. At least half the biology classes in all our schools and colleges should be held not in the confines of the classroom but out in nature, in gardens, on the roadside, in open scrubland, in the forest, on the banks of streams and lakes, anywhere in the outdoors. Here the teachers and students should together learn to locate, identify, observe and develop a relationship with worms and insects, butterflies and wasps, frogs and snakes, birds and bats, herbs and shrubs, lichen and fungi, trees, flowers and fruits...

This method of teaching and learning will inspire both student and teacher to explore nature and take to the study of biology and will make them better educationists and scientists, better citizens and human beings. There is little doubt in my mind that it will not only give a fillip to areas of organismal biology such as ecology, behaviour and evolution but will also provide a strong foundation to those students who wish to pursue more reductionist areas of biology such as genetics and molecular biology. I am therefore confident that it will spawn a new generation of internationally competent researchers in all areas of life sciences and will spell the beginning of the end of the era in which Indian scientists largely play second fiddle to the developed world and generally pursue a rather insignificant and imitative research agenda. But such a revolutionary change in the philosophy of biology education is not easy to usher in. It requires a major change in the mindset of administrators, teachers, students and parents. Hard as these are to achieve, I am aware that even they are not enough. We need the technical means to do so - we need knowledge and books about life in our own outdoors and backyards and roadsides and believe me, we

rarely have them. In a country as biologically diverse as India, it is not enough to have a general knowledge of the plants and animals of our country and guide books about insects or birds of India, of Andhra Pradesh or even the of Western Ghats. We need very specific knowledge of local flora and fauna and guide books written by experts who have firsthand knowledge of our backyards.

How can this be made possible? Who will spend their time acquiring firsthand knowledge of our backyards and write guide books for us? In an ideal world the students and teachers of each school must turn their biology classes into outdoor research laboratories to personally acquire a deep and authentic knowledge of the biology of their backyards and write their own guide books. But as the cliché goes, we don't live in an ideal world. Nevertheless, there may be a ray of hope. I believe that The Rishi Valley School comes as close as we might get to the ideal world I described above. I have had the personal pleasure of meeting the administration, teachers and students and indeed the biodiversity of Rishi Valley School. Here it is possible - you have all the required ingredients - a rich and interesting backyard, amazing students (who live on the grounds and can therefore watch ants and bees even while brushing their teeth!), committed teachers and an enlightened administration.

The present book "Śatpada Our World Of Insects" by Rebecca Thomas and Geetha Iyer is a direct consequence of the rare coming together of all these unusual ingredients. The book truly provides a glimpse into the world of insects in a simple, friendly and colourful way. Perhaps the most promising part is Part III, which has a section entitled "Entomology as a pastime" and also contains tips for student activities, and checklists of insects and plants in the school's grounds. I hope that the book will be inexpensive, will be read and used widely and become a success. And by success I mean that the book should inspire teachers and students of Rishi Valley School to teach biology outdoors and to produce in the next five years, a field guide to the insects of Rishi Valley on the lines of "Birds of Rishi Valley and Regeneration of their Habitats" published in 1994. I am sure your success will spawn similar efforts in many other schools. So here's your challenge and I wish you all the very best.

— Prof. Raghavendra Gadagkar
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