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SYMPOSIUM ON COMPARATIVE BIOLOGICAL STUDIES OF CRICKETS

INTRODUCTION

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The four papers that follow were presented at the American Institute of Biological Sciences meeting at Purdue University, Lafayette, Indiana, in August of 1961. They formed a symposium jointly sponsored by the Society for the Study of Evolution and the Entomological Society of America.

The growing interest in crickets throughout the world results in great measure from the stimulation of an exceptionally perceptive biologist, the late Bentley B. Fulton of Raleigh, North Carolina. Dr. Fulton's influence is apparent not only from the many references to his work cited in the papers below, but also because each of the symposium participants was inspired to an interest in crickets by his investigations and through personal contact with him. Largely because of the impetus given by Fulton's work, the comprehensiveness of biological information on crickets may some day rival that on any animal group.

Crickets are particularly well suited to both laboratory and field investigations because: (1) they are relatively large insects and consequently easy to handle and observe, (2) many species are readily maintained in the laboratory and require little space, (3) their taxonomy poses a number of perplexing problems, (4) they have a fairly rich fossil record, (5) many areas of the world support numbers of closely related species, (6) species ranges are known in some regions with a high degree of accuracy, (7) their acoustical signals facilitate location and observation by investigators, (8) they have an unusually wide range of complicated behavioral patterns for insects, and there is a good start on comparative descriptive information, (9) they have relatively small numbers of chromosomes, which are rather readily prepared for study, and (10) they have varied developmental patterns, offering approaches to some fascinating questions in developmental biology.

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