

MINUTES OF THE FIFTH ANNUAL PACIFIC SLOPE MEETINGS  
OF THE LEPIDOPTERISTS' SOCIETY

The meetings were held on Saturday, August 23, and Sunday, August 24, 1958 at the Santa Barbara Museum of Natural History, Santa Barbara, California, U. S. A.

Registration of members and guests on Saturday lasted from 9:30 to 10:00 a.m. The meeting was called to order by Chairman R. H. T. MATTONI at 10:00 a.m. in the library wing of the Museum. The first proceeding was the election of a Secretary *pro tempore*. LLOYD MARTIN nominated CHARLES HOGUE, who was unanimously elected. Following this brief item of business, Dr. MATTONI regretfully announced the recent passing of Dr. ARTHUR S. COGGESHALL, Director of the Museum, who was to have given the welcome address. Dr. MATTONI introduced Mr. NELSON BAKER, Curator of the Museum, and colleague of the late Dr. COGGESHALL. Mr. BAKER addressed the Section with the following words:

"Mr. Vice-President, Mr. Chairman, members of the Lepidopterists's Society: It is with deepest regret that I report the recent passing of our Director, Dr. ARTHUR STERRY COGGESHALL. The loss is not only ours for, along with his chosen field, paleontology, he had devoted 60 of his 85 years of life to education of the people through museum exhibition. In the 22 years we were fortunate enough to have Dr. COGGESHALL at the helm of the Santa Barbara Museum of Natural History, we have seen great improvements and expansion. If we could all work with his enthusiasm and tireless energy, we would be assured of full, intensely interesting lives. Wherever Dr. COGGESHALL worked, and he worked in many countries of the world, he was always insistent upon opening the facilities of his museums to groups such as our Lepidopterists' Society. In full accordance then with Dr. COGGESHALL's wishes, and as a representative of the staff of the Santa Barbara Museum of Natural History, I welcome members of the Lepidopterists' Society to this, our Fifth Annual Meeting, and extend the invitation authorized by Miss NORA M. MORRES, Assistant Director, to hold any future meetings here, at your pleasure."

FRED THORNE, First Vice-President of the Society, accepted the welcome and expressed deep sorrow on behalf of the Society for the loss of Dr. COGGESHALL.

Since N. D. RILEY of the British Museum of Natural History was unable to attend, the President's message was read by Dr. MATTONI. It is reproduced below.

"Being a very dutiful President, I am obeying the behest of our officers, who really run our Society, and sending you this brief message on the occasion of the Annual Meeting of the Pacific Section members. This is an eminently satisfactory arrangement, for it skillfully allows your President to escape the formality of delivering one of those Presidential addresses which so often are almost as great a bore to those that give them as to those who receive them. Such message as I can send you now will certainly be brief, as I'm sure you would wish it to be, but I fear also that it may well lack substance.

"A week ago today there came to an end in London the 15th International Congress of Zoology, after a strenuous week not wholly devoted, I'm glad to say, to the serious study of the 480 papers communicated to its members. Its central theme was twofold, celebrating simultaneously the bicentenary of the publication of the 10th Edition of LINNÆUS' *Systema Naturæ* and the centenary of the first enunciation of the theory of Evolution by Natural Selection, jointly by DARWIN and WALLACE. What more fortunate conjunction of dates could there be for entomologists, leaving aside zoologists working in other fields? I was tempted to say more restricted fields, but that would hardly be fair. Without some simple system of classification such as that introduced by LINNÆUS, what sort of chaos should we have been in by now, with three-quarters of all living species of animals falling to us to be named, arranged, ticketed, docketed, pigeon-holed and catalogued? Looking back over the last 200 years, progress seems at times to have been strangely slow. Why did a hundred years elapse between the first orderly arrangement of the animal kingdom and that flash of genius needed to ex-

plain how those same animals got there, not only in our classifications but in nature; in fact, in the world in which they live? The advent of DARWIN's theory can be said with some justification to mark a renaissance of biology after a long period of stagnation during which faith fettered the freedom of intellect. The hundred years that have followed have led us from an almost unquestioning belief in the creation and fixity of species to a realization not only of the fact of evolution but of its mechanics, and almost to the solution of the problem of how life itself originated. And in this entomologists have played no small part, from WALLACE, himself no mean entomologist, to the present day. Not long after DARWIN, BATES produced his theory of mimicry, subsequently elaborated by FRITZ MÜLLER and later by POULTON and his school, a theory that can only be explained in the light of natural selection, whatever its antagonists (if there still be any) may say. Later came the rediscovery of MENDEL's work, and it is interesting to speculate what DARWIN's reactions to MENDEL's experiments might have been had he known of them. Here was the key which unlocked the door to the machinery of natural selection, and it was not long before insects were recognized as most admirable subjects for experimental genetics. Using the common European Currant Moth (*Abraxas grossulariata*), DONCASTER discovered sex-linkage; and using *Drosophila* a whole school of geneticists soon discovered, one is tempted to say, almost everything else. Now, through the work of entomologists like DOBZHANSKY and HOVANITZ in the United States and E. B. FORD and his Oxford school in England, all of them using Lepidoptera, we are beginning to learn something of the genetic barriers between species, and almost to see natural selection producing evolutionary results 'before our eyes.' The 'marvels of creation' were a constant source of wonder to our grandparents and their forebears; nowadays if we touch a piece of bark and it walks off, rub a thorn, only to see it fly away, we can offer acceptable explanations of the astonishing adaptations of these insects. The same can be said even of such incredible developments of shape, form and habits among insects as I have had the privilege of seeing illustrated recently in E. S. ROSS's fantastic colour transparencies taken in the Amazons; in the light of present-day knowledge such marvels lose none of their wonder, if anything they become doubly marvelous. Of such insects, indeed, one might say, like the old farmer after stolidly contemplating a rhinoceros for several minutes, 'Martha, there h'aint no such hanimal.'

"But I fear I weary you. You need to be up and doing. And what a country you live in, for just that. California itself is three times as big as my own small homeland, it has many times the variety of environment; with its sea-board and mountains, plains and alpine valleys, deserts and forest it is full of the stuff that delights the student of variation and evolution. Have you yet solved the systematic problems of such genera as *Argynnis*, *Melitæa* (or is it *Euphydryas* now?), *Colias* and *Hesperia*, all of them incidentally gifts long ago from the Old World (like many other troubles), from which this message comes?

Good hunting to you all!

/S/ N. D. RILEY

30th July, 1958."

Various announcements and arrangements were then made. Those present were reminded of the dinner reservations that evening with an informal get-together to follow. Dr. MATTONI announced a change in the Sunday afternoon symposium upon receiving word that one of its participants, DAVID L. BAUER, would be unable to attend.

The time remaining in the morning session was occupied by the reading of an invitational paper titled, "A Basic Classification of the Types of Animal Movements, Based on a Consideration of the Relative Essentiality of its Qualities," by CHARLES HOGUE. It pointed out the general lack of a precise terminology in the field of animal migration and suggested that a reevaluation of the different types of animal movements and their synthesis into a sound classification might provide a basis for redefinition and clarification of terms. An attempt at such a reevaluation constituted the main body of