

Frederick B Isely (1873-1947)

One of the leaders in the investigation of the ecology of the orthoptera, Frederick B Isely, died December 30, 1947, at San Antonio, Texas. Professor Isely was born of Kansas pioneer stock June 20, 1873, at Fairview, Kansas. After education at Fairmount College and at the University of Chicago and a varied teaching experience in high schools and colleges, he became a college administrator in 1920, serving as dean, first of Culver-Stockton College and, later, Texas Woman's College. He returned to full-time teaching in 1931, at Trinity University, and was associated with this institution until his death, though his nominal retirement came in 1946. On the occasion of his retirement, Trinity awarded him the honorary Sc.D. degree.

The first important research engaged in by Dr. Isely concerned the orthoptera of Kansas, but this interest was replaced for a time by his studies of the distribution and migration of fresh-water mussels, this investigation being sponsored by the U. S. Bureau of Fisheries. After an interval in which teaching and administrative work eliminated research, Dr. Isely returned to his first interest, orthoptera. From the time he gave up administrative responsibilities until his death he was engaged in a continuous program of research on the ecology of the Acrididae and Tettigoniidae.

Among the important achievements coming from this series of studies was the clear experimental demonstration that many orthoptera have highly specific food habits. Associated with this was the rather detailed correlation between mandibular morphology and food habits. Incidental to major investigations, but creating a great deal of discussion at the time of publication, was the experimental demonstration of the advan-

tage of concealing coloration in protecting grasshoppers from predation by birds. At the time of his death Professor Isely was organizing in manuscript form his notes on the food habits of the Conocephalinae. This material clearly suggests that the carnivorous feeding of the meadow-grasshoppers, previously considered abnormal, is a part of the normal behavior of these insects.

That such a research program was carried out in a college where every instructor had a heavy teaching load, and Professor Isely was the only teacher of biology during most of these years, suggests a remarkable achievement. It is fortunate that recognition by both the National Research Council and the American Philosophical Society provided the necessary financial support, but the success of the program was certainly due primarily to a dominating curiosity about nature and a remarkable innate faculty for research.

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