

ture recorded at the bottom (8,080 feet) of the well in Westmoreland County, Pa. The average increase in temperature from the surface to the bottom of this well is about 1.76 degrees Fahrenheit per 100 feet. The data for all the wells show that the average increase per 100 feet varies considerably and the rate of increase is not uniform.

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THE MEIGEN 1800 NAMES AGAIN

I EXPECTED my somewhat lengthy discussion of the Meigen 1800 names¹ to be my final one on the subject, but the recent article by William F. Rapp, Jr.,² leads me to believe that it was not so widely read as I had hoped. It is rather astonishing that Mr. Rapp finds Opinion 152 of the International Commission on Zoological Nomenclature so important, since it is merely a restatement of Opinion 28. The only difference lies in the fact that there is now a greater body of Opinions, particularly number 46, on which to establish the validity of names which were declared available in 1910.

Opinion 28 was not ambiguous, nor did the commission fail to answer, as well as it was in its power to do so, the question that J. M. Aldrich asked relative to the validity of the Meigen names. One should realize that it was impossible for the commission to state that the Meigen 1800 names were valid, since this would have involved an exhaustive examination of each name to determine its possible homonymy. This was the duty of the dipterists. It is admitted that until Opinion 46 was published in 1912 the status of binary names was in doubt, but after that date it was only necessary for the dipterists to determine the properly designated genotype for each name and to use the name for the genus to which that genotype belonged. A number of workers did this and important publications, particularly in Europe, followed the Rules. The only alternative, if one believed in following legal procedure, was to request suspension of the Meigen 1800 names under the plenary power of the commission. In the 37 years since Hendel resurrected the names I do not know of a single request for suspension of these names having come to the commission. Abrogation of Meigen's 1800 paper is unthinkable, in view of Opinions 28 and 152, although it is possible that a few of the names that have not entered the literature to any extent, or that have been misapplied, might be favorably considered for such action.

The fundamental questions are—Should we accept priority as the basic principle on which zoological

nomenclature must rest, and should we accept the genotypes that have been designated for the Meigen 1800 names in accordance with Opinions 46 and 65? The answer to the first would seem obvious. Unless priority is accepted, the way is left open for any one to use whatever names suit his fancy. If we are to have stability, the principle of priority must be jealously guarded, and any suspension of the Rules should be looked upon as weakening the nomenclatorial structure. The answer to the second question is clear except in those cases where there is serious doubt as to the fitness of the genotypes. Where it can not be proved that the genotype designation is incorrect, we must assume that it is correct; where there is good evidence that an error has been made, it becomes necessary, if a change of name appears desirable, to place the case before the commission in accordance with Opinion 65. It is my opinion that we will achieve stability quicker if we accept the genotype designated for each one of the genera and cease to worry about Meigen's descriptions.

One more point should be raised. Mr. Rapp speaks of "Diptera nomenclature." It should be stressed that the commission is dealing with zoological nomenclature and that any principle laid down by the commission applies throughout the animal kingdom in exactly the same manner. It is evident from the 58 per cent. affirmative reply to Edwards's second question, "Do you consider that the omission of specific names renders the Nouvelle Classification names invalid?" that many dipterists either did not know of Opinion 46 or chose not to follow it. It is the duty of zoologists to learn and apply the Rules after they have been made by the commission. Only in this way can we hope to attain stability.

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RE-EMPLOYMENT OF BIOLOGISTS NOW IN THE ARMY AIR FORCES

DURING the war approximately two hundred physiologists and general biologists have been serving in the Army Air Forces as Aviation Physiologists. These officers have discharged important duties in training, research and testing programs. With the close of the war, they are gradually becoming available for release from military duty, and fifty or more of them will desire teaching or research positions in civilian institutions.

The officers were chosen for this service after a careful consideration of their scientific training and their personal qualifications. Accordingly, they are biologists with wide scientific interests, demonstrated

¹ A. Stone, *Ent. Soc. Amer. Ann.*, 34: 404-418, 1941.

² W. F. Rapp, Jr., *SCIENCE*, 102: 17-18, 1945.