This situation, arising where a name is published with more than one spelling, was dealt with by the Fourteenth International Congress of Zoology in Copenhagen, 1953, which decided, as later published in Decision 71 (1) (a) (ii), that "Where there was more than one Original Spelling and in the case of none of these spellings was there clear evidence that it was the result of an inadvertent error, the *Valid Original Spelling* is that one of the Original Spellings used by the *First Subsequent User* of the name"¹.

Although on p. 596 of his book Oliver again used the spelling "*Pyramida*" when he stated: "Apparently *Pyramida* is closely related to *Tribonyx*", and although in the index on p. 657 is listed the entry "*Pyramida*, 595", there is little "clear evidence" as to whether he intended to use the spelling "*Pyramida*" or "*Pyramidia*". The first mention of this bird in the book is in the preface on p. 16 where it is listed as "*Pyramida hodgeri*" [sic]. This is only one of the numerous errors, typographical or otherwise, which occur in this book. However, it does seem likely that "*Pyramida*" was intended, and, although I have searched the relevant literature, including reviews and abstracts, I can find no other user of this name since 1955 apart from my own reference in the press as "*First Subsequent User*". I feel, in view of the confusion that would otherwise inevitably result, that it is advisable to place on record the reason why "*Pyramida*" must be used as the correct spelling for the generic name of the extinct New Zealand gallinule.

I am indebted to Mr. Francis Hemming for his encouragement and advice on this (private communication) and other points in connexion with names of the extinct birds of New Zealand, and I must also thank Dr. C. F. A. Pantin for his interest. I should also like to pay tribute to the late Dr. W. R. B. Oliver, to whom I am indebted for my initial interest in this field.

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Use of the Electronic Flash to record the Activity of Small Animals

DURING field-observations of mosquitoes (*Aedes caspius* Pall.) in Abu Ghraib, Iraq, it was found that the insects were not disturbed when being photographed by means of an electronic flash; in this they resemble birds, small mammals and diurnal insects. The firing of ordinary flash bulbs will always cause resting mosquitoes to fly away; and swarming males will disperse for a period of several minutes after a flash-bulb exposure. The firing of an electronic flash, even from as close as 30 cm., did not appear in any way to disturb resting or feeding mosquitoes, and not the slightest change in pitch of male swarms was discernible when they were photographed by the same device. It is not known if the insects react differently to the two light sources because of differences in the duration of light, or whether the disturb-

Fig. 1. Activity of ten female *Aedes taeniorhynchus* caused by the change from light to darkness

ance produced by the ordinary flash bulb results from the considerable emission of radiant heat. But whatever the reason, it seemed that this indifference to the electronic flash could be used for recording photographically the activity of small and light insects.

It is well known that the activity of many animals, especially nocturnal ones, shows a periodicity directly or indirectly dependent on the daily variation in light between day and night, and many methods of recording the activity of animals have been described. Most of these operate on the principle that displacement of the weight of the animal causes a mechanical displacement which is in some way recorded. This method, however, is not easy to use with animals weighing only a few milligrams. It would be much more convenient to take pictures of the animals at suitable intervals; but this has so far met with the difficulty of getting pictures during the dark periods. If the animals do not react to the electronic flash as light, however, it should be possible to record photographically the activity by means of a synchronized electronic flash independently of the changing illumination used to produce the activity periods. This has been found to be possible.

The animals (mosquitoes) are enclosed in a chamber 45 mm. × 35 mm. and 15 mm. deep. The front wall is a glass plate through which the animals are exposed to light simulating day and night periods, and through which they are photographed every minute by means of a recording camera. The camera is synchronized with the electronic flash, which illuminates the animal chamber from behind through two plates of opal glass, one of which is the back wall of the chamber. A detailed description of the apparatus will be published later.

By using the displacement of one individual between two successive pictures as a unit of activity, it is possible to get a detailed quantitative expression for activity. It is possible also to record the movement of several individuals simultaneously under identical conditions. The possibility of seeing what the animals actually are doing, thus facilitating the analysis of special types of behaviour, is perhaps the greatest value of the method.

That at least some insects are indifferent to the electronic flash has certainly facilitated the study of activity; it may be useful also in other areas of study.

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