

Professor Needham's suggestion that trinomials be discarded entirely would only make a bad mess worse. Trinomial nomenclature, recognizing very slight differences by name, whether they be biological, geographical or environmental differences, must be relied upon to save the idea of species, based upon more important and constant differences. It is often necessary to discuss such races, and they can be designated intelligibly only by giving them names. To give them binomial names, thus placing them in the same rank as full species, would be biologically less accurate and would also greatly multiply the species which, to use Professor Needham's own phrase, do not "concern the general reader."

However, I am in hearty sympathy with Professor Needham's protest against the multiplication of genera, now rapidly reaching the point where one must "learn a new genus for almost every species." A vast number of genera now recognized would better serve the ends of science if regarded as subgenera. This splitting process is discouraging to students who would like to engage in biological work, and it makes most of the literature of biology usable to only a very few, neither of which results is desirable. If it were necessary to consider all these small groups genera, regardless of how slight the differences by which they are separated, nothing more need be said, but it is not at all necessary.

Genera are not of equal rank and can not be. Division of species into genera, families, etc., is a man-made system, purely for the convenience of men and women. The question as to whether a given group should be considered a genus or a subgenus is purely a matter of individual opinion, in most cases. It no more accurately represents nature to call most of these groups genera than to call them subgenera. A jurymen explained that the jury could have agreed except for eleven obstinate men on the jury. Of course the specialist naturally considers his own brain-children more important than any others, but are they? Should he not consider the thousands of naturalists who are not specializing in his particular line? Should he not endeavor to make his writings and addresses intelligible to a large number of people instead of to two or three narrow specialists, and instead of trying to obscure or conceal his ideas from most of his readers and hearers? Using a well-known generic name, followed by a subgeneric name in parentheses, would indicate to both specialist and non-specialists what organism is under discussion, which is the real purpose of nomenclature, and the subgeneric name would sufficiently indicate the slightly differentiated group in which the specialist is interested. Those who believe that "the purpose of language is to conceal thought" from everybody else will continue to multiply genera, while those who use

language to make their meaning plain to all who hear or read will relegate many genera to subgeneric rank.

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A NATURAL CAT MUMMY

THE November-December, 1929, issue of *Natural History* prints the following statement:

In a recent issue of *Palaeobiologia*, Professor Julius Vigh of Budapest describes a natural mummy of a house cat. After death the cadaver of the cat dried out thoroughly without decay and has been preserved for more than ten years.

The writer has in his possession a similar specimen which he has used for the past six years in lectures to his classes in paleontology at Brown University, since it is an illustration of how fossilization may originate through desiccation. The history of the specimen and its state of preservation may interest paleontologists and others.

The cat in its present state came into the writer's possession about 1911 or 1912 while he was a boy in high school at Plainfield, New Jersey. It had been found in a barn, under the following circumstances. The finder, a fellow student of the writer, had disturbed some hay which had long lain in a corner of the building. In so doing he came upon the dried body of the cat lying on its side. How long it had been under the hay there was no means of knowing, but certainly it had been there long enough for complete desiccation of what parts remained at the time of discovery. Turning the carcass over, an opening nearly as large as a tennis ball may be observed on the under (right) side, exposing nearly the entire visceral cavity from which all soft parts have decayed. These, and part of the left hind foot, the tail and most of the fur are missing, but otherwise the specimen is practically complete, even to the dried eyeballs and remnants of whiskers. The stiff, hard, resonant skin is drawn tightly over the bones in all parts, and the ears are dried to thin, parchment-like pockets. When first secured, the cat had a slight odor, but this long since disappeared, and the specimen has been kept for some seventeen or eighteen years without any preservative or particular care. To-day it shows no sign of further deterioration. Evidently, the viscera rotted away soon after death; and, this locus of decomposition having been removed even after the manner of preservation of the Egyptians of old, the rest of the body, partly shut off from the air by its hay covering, "kept" perfectly.

The manner of death may be surmised. There is evidence of mutilation prior to death. The missing tail may have been lost before or since the cat died; that can not be definitely determined. But the left hind foot is crushed, the bones protruding from the

ragged fragments of dried skin, and the toes missing. The mouth gapes open, and the head is twisted sideways in an unnatural attitude as if the animal died in a paroxysm. It seems probable that the foot was injured in some manner, possibly by being trampled upon by one of the horses kept in the barn where the cat was found. Finding itself wounded, the creature crawled into the hay and expired.

The writer recalls a similar case of a cat injured on a New England farm. This cat lost a foot in the mowing machine and crawled away to die in a small loft over a shed where it was subsequently found. Whatever was the actual fate of the mummified cat we may only guess, but the excellent specimen remains. Although not a true fossil, at least it is akin to the authentic remains, since it graphically demonstrates the preservation of such classic examples as the Moa skin and feathers from New Zealand caves or the ground-sloth skin and hair from the Americas, both fossils formed by desiccation.

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MOUSE OPOSSUM STOWAWAYS ON BANANAS

It seems worth while to add another note relative to finding the small tropical marsupial *Marmosa*, known as the mouse opossum, as a banana stowaway.

Previously, Dr. L. A. Adams¹ recorded finding some of these marsupials, and Professor Geo. Wagner and also Mr. E. R. Warren² reported others.

A female with litter was brought to our laboratory on June 14, 1929, indirectly from a grocery store, one of an Akron chain store concern. It had been hiding in a bunch of bananas, quite possibly coming from Central America. I could determine the animal to the genus *Marmosa*, but not to species. This adult female, with total length of 28.5 cm, or 11.2 inches, including the tail which itself was 14.5 cm or 5.7 inches long, was smaller than the measurements given by Anthony for one species *M. isthmica*, and may possibly be the *M. zeledoni* he describes as typical from Central America.³

Nearly a dozen young were clinging to the mother, but they were hard to keep count of, unless the mother, who kept well secreted under leaves in a box, was much disturbed. She may have been thus disturbed previous to receiving and again was badly disturbed a week later in attempts to photograph her out in the bright light of the open. She was naturally inactive, secretive, though very much on the alert and seemingly nervous. She would snap viciously with remarkable speed when a hand or instrument was placed within a few inches of her head. The young clung with claws almost anywhere on the fur, but principally ventrally, and occasionally on the tail. A few times one of the young wandered off a few inches. When I approached it closely the mother would grasp it with the claws of one foot and speedily thrust it under her.

It was seemingly impossible to furnish the desired diet or a diet entirely adequate for lactation. The mother ate of bananas regularly, as much as possibly an eighth or a tenth of a banana a day. Following the information previously given that insects were normal food, various insects both dead and live were put near her, but there was no evidence of feeding upon these. Several young died in the early days of the two and a half weeks I had the mother alive in a box. Possibly some young had been abducted, but as I found parts of two bodies in the box it appears certain that the mother ate of her young. No other animals could have entered the box, since it was securely covered with a fine screen. Three young were alive for some days. Then one day only one was left. The next day the mother was gone, undoubtedly escaping after some one had removed her in order to handle her. Later she was found in an open jar of formaldehyde solution. Attempt at feeding the one remaining young with cow's milk was unsuccessful.

It seems of interest to add that the mother made a low, clicking, chirping sound quite uniformly when disturbed.

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A BIOLOGICAL SURVEY OF LAKE ERIE

DURING the summers of 1928 and 1929 an extensive biological survey of Lake Erie was carried out through the cooperation of the U. S. Bureau of Fish-

eries, Buffalo Society of Natural Sciences, New York State Conservation Department, the departments of game and fish of Pennsylvania, Ohio and of the government of Ontario, and the Health Department of the City of Buffalo. The primary purpose of this survey was an inquiry into the reasons for the decline in the commercial fishery industry in the lake, and included in its scope the study of various biological,

¹ SCIENCE, February 24, 1928.

² SCIENCE, April 20, 1928.

³ Anthony, "Fieldbook of North American Mammals," p. 7.