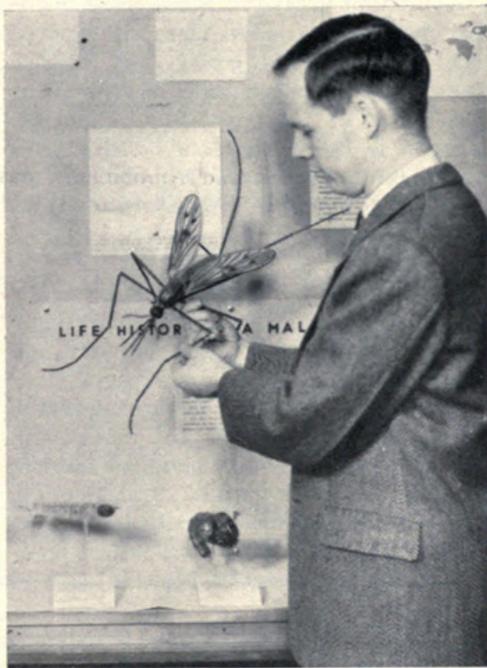


MALARIA MOSQUITO SHOWN IN GIANT-SIZE MODEL

BY RUPERT L. WENZEL
ASSISTANT CURATOR OF INSECTS

A distinguished addition to the reproductions of plants and animals for which Chicago Natural History Museum is noted is the series of mosquito models that was recently placed on temporary exhibition in Stanley Field Hall. The four models, which represent the life history of the common malaria mosquito of North America, are twenty-five times natural size. They were executed by



'TRY THIS FOR SIZE'

Artist-Preparator James E. Trott with the giant anopheles mosquito model, creation of which represents almost a year's working time.

Mr. James E. Trott, Artist-Preparator in the Department of Zoology. The common malaria mosquito, known technically as *Anopheles quadrimaculatus*, is the most important and one of the most widely distributed carriers of malaria in the United States.

The models constitute part of a series prepared for an exhibit on mosquitoes and malaria that will be installed in Albert W. Harris Hall (Hall 18) at a later date. However, it was felt that they were of such great intrinsic interest that it would be desirable to display them alone in a conspicuous place before installing them in the permanent exhibit. The exhibit on mosquitoes and malaria is one of a series to be prepared in continuation of plans for the insect hall.

Because of the complex external structure of insects, it is necessary for the artist thoroughly to understand insect anatomy if he desires to produce life-like models. Thus, the unusually detailed and scientifically accurate mosquito models are of special interest to both the zoologist and the layman. Before beginning work on a model,

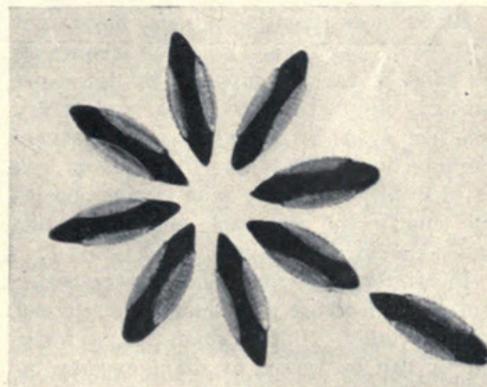
Mr. Trott made detailed studies, drawings, and color notes from living and preserved specimens as well as from published descriptions and illustrations. As work progressed on a model, comparisons were continually made with living material.

The eggs (*see cut*) were cast in celluloid. The bodies of the other models were carved from plexiglas; the surface scales and bristles are reproduced in celluloid or other plastics, or are represented by mammal hair. The larva and pupa were carved and painted from within to reproduce the internal organs that ordinarily are visible from the outside. The model of the adult mosquito (*see cover picture*) is made of more than 20,000 separate pieces, including scales and bristles. A little more than a year was spent in making the four models of this series.

The Army Medical Department Research and Graduate School, the United States Public Health Service, and the Illinois State Natural History Survey generously cooperated in supplying living and preserved specimens as they were needed.

METAMORPHOSIS SKETCHED

The eggs of anopheles mosquitoes are laid in loose groups on the surface of still water and have air cells that serve as floats. They hatch in two to four days and the larvae or "wigglers" emerge. These have special "float hairs." They feed on microscopic organisms during the one to two weeks of the larval stage. When fully grown the larva changes into a pupa or "tumbler," which is active but does not feed. This stage lasts two to three days, during which the adult mosquito forms; then the pupal skin splits and the adult emerges and rests on the water surface until its wings and body harden, when it flies off to mate and feed. The female apparently must have a blood meal before its eggs can develop



MODELS OF ANOPHELES MOSQUITO EGGS

In the exhibit they are magnified 25 times; in the illustration above approximately 18 times.

properly, which accounts for a great deal of discomfort experienced by human beings as well as actual danger of disease. The adults usually live from ten days to two weeks, but some may live several months.

YOUNG ART STUDENTS DISPLAY CREATIONS

Beginning May 4 and continuing through May 31 there will be a special exhibit in Stanley Field Hall of thirty-six selected pictures in a variety of media—chalk, crayon, water colors, and oils—produced by students of the Junior School of the Art Institute of Chicago. These students, ranging from 8 years through high school age, are enrolled in various classes that for many years have availed themselves of natural history exhibits as subjects for painting and design and of classroom facilities through co-operative arrangements of the Art Institute and Chicago Natural History Museum. The paintings as a whole display imaginative treatment in composition and the use of color. They were chosen on the basis of relative excellence and are representative of the accomplishment of different age groups and different types of working materials. The Museum's part in offering its facilities for this field of study is only one of the many and widely varied kinds of educational activities in which the institution engages.

LECTURE TOURS IN MAY, DAILY EXCEPT SUNDAYS

Tours of exhibits, under the guidance of staff lecturers, are conducted every afternoon at 2 o'clock, except Sundays and certain holidays. On Mondays, Tuesdays, Thursdays, and Saturdays, general tours are given covering all departments. Special subjects are offered on Wednesdays and Fridays; a schedule of these follows:

Wed., May 4—Bag and Baggage—Travel Equipment in Many Lands (*Harriet Smith*).

Fri., May 6—Snake Stories. Illustrated introduction in Meeting Room (*Lorain Farmer*).

Wed., May 11—Medicine Men—Primitive Medical and Dental Practices (*Marie Svoboda*).

Fri., May 13—Superstitions. Illustrated introduction in Meeting Room (*Harriet Smith*).

Wed., May 18—Courtship in the Animal World (*Lorain Farmer*).

Fri., May 20—Burial Customs (*June Buchwald*).

Wed., May 25—Flowers as Symbols—Use of Flowers to Express Ideas (*Miriam Wood*).

Fri., May 27—Life in the Water. Illustrated introduction in Meeting Room (*Jane Sharpe*).

Persons wishing to participate should apply at North Entrance. Tours are free. By pre-arrangement, special tours are available to groups.



Wenzel, Rupert L. 1949. "Malaria Mosquito Shown in Giant-Size Model."
Bulletin 20(5), 3-3.

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