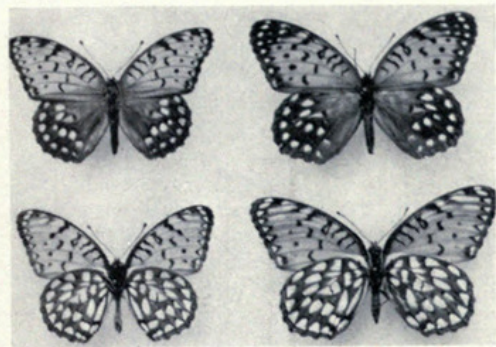


A NEW BUTTERFLY EXHIBIT

By WILLIAM J. GERHARD
CURATOR OF INSECTS

A case containing a selected series of the more attractive North American butterflies has recently been placed on exhibition in the west end of Albert W. Harris Hall (Hall 18). Thus, after a regrettably long delay, insects are again represented among the Museum's extensive zoological exhibits.

The exhibit begins with butterflies, as these sunshine-loving insects are especial



REGAL FRITILLARY BUTTERFLY

This butterfly (*Argynnis idalia*) is found from Maine to Arkansas. It is the most easily recognized of the six kinds of fritillaries found in the Chicago region, and may be identified by the large silver spots on the under side of wings. Top figures in the illustration show the upper side of male at left, and female on right; lower figures show the under side of each sex in same left-to-right order. The regal's caterpillar eats only the leaves of violets.

favorites with collectors, school children, and nature-lovers, and are most frequently inquired for by teachers of nature study. Specimens for three more cases of butterflies and moths have been prepared for exhibition; the North American cases will be followed by an exhibit of some of the most remarkable and brilliant exotic forms.

So many species of butterflies and moths are so nearly alike in shape, color and markings, that they can be separated only after a long and careful study. Therefore, only the more attractive and easily recognized species are suitable for exhibition. For this reason the specimens on display will always be much fewer in number than those contained in the Museum's reference collection, which is accessible to any person deeply interested in the study of insects. Furthermore, certain butterflies and most moths will fade or change in color when they are exposed to strong light for a number of years, and often such specimens cannot easily be replaced. Most of the moths and some of the butterflies formerly exhibited in the Museum are now valueless as a result of their exposure to daylight. It is believed that the fluorescent lights now used for the illumination of the Museum's zoological exhibits will have a much less injurious effect on the specimens.

LIFE-HISTORY SERIES INCLUDED

Most of the specimens in the new case are arranged so as to show the upper and

under surfaces of their spread wings, and both males and females are exhibited when they differ to a noticeable degree. At one end of the case is a display of the life-history of the pipe-vine swallowtail, the leaves and caterpillars reproduced in wax in a life-like shape and color. Butterflies are more frequently seen than the closely related and much more numerous moths, because with few exceptions, they are day-flying insects, whereas the moths are mostly night-fliers.

From all other insects butterflies and moths are easily distinguished by having four membranous wings, which are partly or wholly covered on both surfaces with minute overlapping scales and often with an admixture of fine hair. Their bodies and legs are also covered with scales, but this is true also in some other insects. The upper surfaces of the wing scales have fine longitudinal striae, or parallel shallow grooves, and when they are exceedingly close together—approximately 35,000 to an inch—they diffract the rays of light, producing the brilliant iridescent colors characteristic of a number of tropical butterflies and moths.

The scientific name of the order of insects to which the butterflies and moths belong is "*Lepidoptera*." This appropriate name is formed from two Greek words: *lepto*, a scale, and *pteron*, meaning a wing. As certain members of an order of insects or other animals often have similar structures that are believed to indicate still closer relationship, it has been found convenient and desirable to subdivide or classify them into smaller and smaller divisions, like suborders, superfamilies, families, subfamilies, genera, species, geographical races and seasonal forms. All of these divisions have definite latinized names. Many insects do not have common names, and, when they do, they of course are not the same in different countries; but the scientific names, except for special reasons, are not affected by the language of any country. The carefully prepared labels in the new exhibit form an excellent introduction to the subject of zoological classification and nomenclature.

ONE HUNDRED THOUSAND KINDS KNOWN

Butterflies and moths are usually divided into two suborders named respectively *Rhopalocera* and *Heterocera*. The former name is formed from two Greek words meaning "a club and a horn;" the latter is derived from the same source and means "different and a horn." As the scientific names of these two suborders imply, butterflies have antennae (feelers) that are slender and swollen or clubbed at their tips, whereas the antennae of moths are either feather- or thread-like. Members of both suborders are found in nearly every part of the world. The range of their distribution extends irregularly from Alaska, Greenland, and Spitzbergen southward to Cape Horn and

the Cape of Good Hope; and from sea level to elevations as high as 16,000 feet. About 100,000 species and races of these scaly-winged insects are known to science. No less than 9,876 species of moths and butterflies, as well as a number of geographical races, seasonal forms, and aberrations, are recorded from America north of Mexico; 992 of these are butterflies.

Like many other insects, butterflies and moths have four stages in their life-history: the egg; caterpillar or larva; chrysalid or pupa; and the adult stage. The caterpillars or larvae have their mouth parts fitted for chewing, and it is in this stage that a few butterflies and many moths are destructive. In the adult stage their mouth parts are adapted only for sucking up liquid food, like the nectar of flowers, the sap of trees, and the juices of fruits. Some moths are incapable of feeding on anything during their adult stages.

LORD AND LADY HALIFAX VISIT MUSEUM

"In England we had heard so much about Field Museum that upon our arrival in Chicago we insisted on making a visit to this great institution."

With this gracious remark made by Lady Halifax, she and Viscount Halifax, British



Photograph courtesy of THE CHICAGO SUN

BRITISH AMBASSADOR AT FIELD MUSEUM

Malvina Hoffman's striking portrayal in bronze of a typical Tamil of India, climbing a "toddy palm," catches the eyes of Lord and Lady Halifax. They were escorted by Mr. Stanley Field (center), President of the Museum.

Ambassador to the United States, introduced themselves at the Museum during their recent stop-over in Chicago.

Mr. Stanley Field, President of the Museum, and Mr. Orr Goodson, Assistant to the Director, conducted the distinguished guests on a tour of certain exhibition halls in which Lord and Lady Halifax were most interested. Particularly was Lord Halifax impressed by the Malvina Hoffman sculptures in the Hall of the Races of Mankind.



Gerhard, William Josiah. 1942. "A New Butterfly Exhibit." *Field Museum news* 13(4), 7-7.

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