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Information on the extinction of butterflies from Ethiopia

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ABSTRACT: Insects are said to be the most successful organism on earth because of their abundance. Auto of the 1.6+million animals known to science 1+ million are insects which are over two third of the described animals so far. Of over 30 insect orders, the order Lepidoptera is the 2nd abundant order comprising about 180,000 insect species. Lepidoptera is divided in two major groups: butterflies and moths. The former species is diurnal, and the latter is nocturnal. The order comprises both beneficial and harmful insects. Some species from the butterflies' group are good pollinators of plants. Butterflies are beautiful which as a result people use them to decorate their houses by hanging dead butterflies on the wall of their houses, which is very common in Europe. For tourist attraction some countries in Africa like Kenya have what is known as a butterfly farm. In Ethiopia up to recent time, most butterflies present in other tropical countries were abundantly present. In Addis Ababa and its surroundings where there are parks, forests, road sides and hotel compounds, it was very traditional to look at six to seven types of butterflies with different colors and sizes flies in the sky. However, this days you do not find any at all times of the year. Similar observations were made in Jimma, Adama, Bishoftu, Nekemet and Asosa. From this non-existence or diminishing number of butterflies, I concluded that butterflies extinction in Ethiopia become a reality. Hence, action should be taken to bring back butterflies to Ethiopia after compiling data on causes for the extinction.

Keywords/Phrases: Butterflies, Extinction, Environmental pollution, climate change

INTRODUCTION

Lepidoptera, derived from the Greek words "lepidō" for scale and "ptera" for wings, refers to the flattened hairs (scales) that cover the body and wings of most adults. It is common worldwide and the third largest order of insects, with approximately 135 families and 180,000 species worldwide.

Lepidoptera (moths and butterflies) is the second largest order in the class Insecta. Nearly all lepidopteran larvae are called caterpillars. They have a well-developed head with chewing mouthparts. In addition to three pairs of legs on the thorax, they have two to eight pairs of fleshy abdominal prolegs that are structurally different from the thoracic legs. Most lepidopteran larvae are herbivores; some species eat foliage, some burrow into stems or roots, and some are leaf-miners.

Adults are distinctive for their large wings (relative to body size) which are covered with

minute overlapping scales. Most entomologists believe that these scales are structurally related to the hair (setae) covering adult caddisflies. Lepidopteran wing scales often produce distinctive color patterns that play an important role in courtship and intraspecific recognition.

Although moths probably diverged from caddisflies in the early Triassic period, about 230 million years ago, adults in a few primitive families (e.g., Micropterygidae) still retain evidence of chewing mouthparts. In all other lepidopteran families, the mouthparts are vestigial or form a tubular proboscis that lies coiled like a watch spring beneath the head. This proboscis is derived from portions of the maxillae. It uncoils by hydrostatic pressure and acts as a siphon tube for sipping liquid nutrients, such as nectar, from flowers and other substrates.

From a taxonomic standpoint, the distinction between moths and butterflies is largely artificial – some moths are more similar to butterflies than to other moths. As a rule,

butterflies are diurnal, brightly colored, and have knobs or hooks at the tip of the antennae. At rest, the wings are held vertically over the body. In contrast, most (but not all) moths are nocturnal. They are typically drab in appearance, and have thread-like, spindle-like, or comb-like antennae. At rest, their wings are held horizontally against the substrate, folded flat over the back, or curled around the body.

Although many Lepidoptera are valued for their beauty, and a few are useful in commerce (e.g., the silkworm, *Bombyx mori*), the larvae of these insects are probably more destructive to agricultural crops and forest trees than any other group of insects.

Butterflies are one of the most graceful and beautiful types of flying insects you will find in your garden. All types of butterflies are beneficial insects because they pollinate flowers and feed on common garden pests. Most people are familiar with the monarch butterfly. However, there are some 18,500 species of butterflies in the world that come in all shapes, sizes, and colors.

Butterflies fluttering around gardens are synonymous with warm summer days. However, some people attach special symbolism or meaning to butterflies. For example, in Asian cultures, butterflies have come to mean long life or love. In

Christianity, the change of the caterpillar into a butterfly symbolizes the resurrection when the caterpillar “dies” and the butterfly is “reborn” in a different body. In some cultures, black butterflies are viewed as an omen of bad news, having a red butterfly fluttering around you can mean good news, or white butterflies can mean good luck. Hence, losing butterfly mean losing so many things.

All butterfly species are classified by the family they belong to. Butterflies in some groups have common identifying features. The main families of butterflies are Nymphalidae, Lycaenidae, Hesperidae, Papilionidae, Pieridae and Riodinidae, In

Ethiopia before a decade 5-6 species of each families present. But, now based on the observation made for one year either you do not find any butterflies in most areas of Ethiopia or you find one or two small size butterflies if you are lucky. Thus, I appeal to the Entomologists to survey the butterflies and report to Addis Ababa University where the survey already started. However, in view most of the butterfly species already disappeared or run into extinction. Below are are pictures of some of the common butterflies we used to see in the sky flying





The monarch is a popular butterfly with black and orange wings and white spots



The red admiral is a type of medium-sized butterfly with black and orange wings and white spots



The black swallowtail is a large beautiful butterfly with black and yellow wings, and red and blue markings



The large sized wings of the swallowtail butterfly are black with yellow bands and small red dot



Limenitis arthemis consists of two main groups: white admirals (left) and red-spotted purples (right) that mimic the poisonous pipevine swallowtail butterfly



Male tiger swallowtails have black and yellow wings while females also have blue markings on the hind wings



Photo by Greg Hume - Wikimedia Commons

The beautiful Pipevine butterfly has black and blue wings with orange spots under its wings



Photo by Greg Hume - Wikimedia Commons

The Orange Sulphur butterfly has orange and brown wings (left) and yellow colored wings on the underside (right)



The zebra longwing butterfly has black and white striped wings with white dots



The Northern pearly-eye is a small-medium sized butterfly with wingspan of 1.7" to 2.6" (4.3-6.7 cm)



The California sister butterfly has black wings with white bands and orange markings



Milbert's tortoiseshell butterflies are commonly found in wet and moist areas



One of the most beautiful butterflies is the buckeye butterfly with its colorful eye-like markings



The question mark butterfly gets its name due to the white mark on the underside of the hind wing



The painted lady is a common butterfly and can be found in America, Asia, Africa and Europe



The glasswing butterfly is easily identified by its transparent wings with orange line around the edges



The cabbage white is a very popular and common butterfly in many gardens











REFERENCES

1. Butterflies' webpage (>10)
2. Field trip reports of butterfly surveys