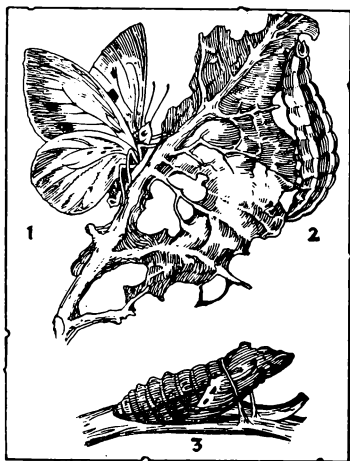


ELEMENTARY SCIENCE SECTION

Hunting Butterflies and Moths



IN some of the islands of the Philippines and the neighboring East Indies are to be found butterflies and moths which are very valuable to collectors, and for which fairly good prices are paid, ranging from one peso to 120 pesos for one specimen. Cloth manufacturers buy beautifully marked species of butterflies and moths to get ideas of new designs for their cloth. Of course, fancy prices are paid for only a comparatively small number of specimens, and many bring only small prices.

The bird-wing butterflies of the East Indies belong to one of the most famous species of butterflies. There are a great many of

this species, but all have the same characteristic—long, slender wings out of all proportion to the size of their bodies, which enable them to fly as swiftly as the birds. Some of them even have markings on their wings which give them the appearance of birds.

A gorgeous yellowish green-and-black butterfly which sells for as much as 120 pesos was discovered by a collector on one of the expeditions sent out to the Dutch East Indies.

Another magnificent butterfly of the bird-wing species has wings heavily "framed" in black with a series of metallic toothed splashes of green running down the length of the wings, and a lovely "collar" of crimson separating the head from the trunk. The English Rajah of Sarawak, on first capturing it, said it should be called the "king" of butterflies, because it is so royal in appearance.

The usual way of catching butterflies is by means of nets on long poles. Some of the species desired by collectors flutter among the topmost branches of trees. In order to get them a platform is built high up between the tree-trunks, and natives, armed with the usual nets on long poles, wait until a desired butterfly comes within striking distance.

After the insects have been captured they must be killed. One should kill them in as

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OUR BIRD FRIENDS

(Continued from page 177)

No. 4, the cuckoo, gets its name from its call. No. 5, the woodpecker, has a strong bill which can drill holes in trees or boards. The beautiful dove, illustrated in No. 6, is a member of the family of pigeons. No. 7, the owl, is a bird of prey, and is distinguished by its large head and eyes, short, hooked bill, strong talons, and more or less nocturnal habits. The bittern, shown in No. 8, belongs to the heron family.

A List of Philippine Birds

The following list of Philippine birds is not complete, but includes the names in English and one of the Philippine dialects of most of the birds to be found in the Islands:

Bittern, cinnamon — Bacaw canela
 Bluebird, chestnut-headed — Peik-peik
 Chat, pied — Sipao, tererekoy
 Crane, Philippine ash — Tica, matang bayani
 Cuckoo, rough-crested — Manok manukan
 Cuckoo, rufous-bellied — Ibong may sakit
 Curlew, Asiatic — Balankauitan
 Dove, Dussumier's turtle — Bato bato de collar
 Duck, tufted — Patong bundok
 Egret, cattle — Tagac
 Finch — Maya
 Fly-catcher, black-naped — Pitpit azul.
 Fly-catcher, guava — Luklac
 Fowl, red jungle — Labuyo
 Gallinule, Philippine blue — Acbag

Heron, Eastern purple — Kandang ajok
 Heron, Javan green — Bacaw itim

Heron, night — Bacaw gabi
 Kingfisher, Asiatic — Susulbot
 Kingfisher, white-collared — Kasay-kasay

Mallard, Philippine — Dumaras, patong bundok

Moorhen — Uloc
 Nightjar, Philippine eared — Kandarapa

Owl, grass — Kuagong talahib
 Owl, Philippine — Kuliawan
 Parakeet, Luzon hanging — Colasisi

Pigeon, Bonaparte's imperial — Balud

Pigeon, Philippine green — Punay

Rail, Philippine — Ticing kilayan

Robin, Philippine magpie — Dominico

Shrike, large-nosed — Tarat
 Shrike, Philippine red-tailed — Cabezote

Shrike, white-bellied swallow — Pagatpat

Snipe, painted — Pakubo
 Snipe, Suinhoe's — Kanduro, pagitla

Sparrow, Malayan grey — Mayang costa

Sparrow, tree — Mayang bato

Starling, Chinese — Martinez

Sunbird, yellow-breasted — Tamsi

Swallow, Asiatic — Layang-layang

Tailorbird, Derbuy's — Pepit mananahi

Warbler, Northern willow — Pitpit

Warbler, striated marsh — Sunod kalabao

Weaver, Luzon brown — Ma-

HUNTING BUTTERFLIES AND MOTHS

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painless a way as possible. Speed is necessary; otherwise the delicate scaling of the wings is injured as the butterfly struggles in the killing-bottle before it is overcome by the gas.

Various kinds of moths are also desired by collectors; especially the large Atlas moths, some of which have a wing spread of almost a foot. In the Philippines giant moths are found in Negros and other islands.

Moths are distinguished from butterflies by their feathered feelers, by their wings being horizontal when resting, and by their flying usually at night.

One of the most remarkable things about butterflies is their series of changes before becoming butterflies. The female butterfly lays many eggs which produce caterpillars. After a short time they take a new shape and become chrysalids. Within its covering the insect develops, and comes out as an active and beautiful butterfly. In the illustration on page 176, Figure 1 is a picture of the butterfly, Figure 2 is a picture of the caterpillar, and Figure 3 is a picture of the chrysalis.—*Adapted from Panorama.*

yang poking
 Weaver, Philippine — Mayang pula
 Woodpecker, large-billed pygmy — Kalpinterong maliit