

AMBUSH

by J. BERNARD GOLLOP*



Closeup of back and side of ambush bugs.

Gary Gentle.

The butterfly's wings were quivering and it did not fly as I approached. When I was only a few inches away, it fell off the yellow gumweed flower but did not fall to the ground. Closer investigation showed that it was being held by an insect much smaller than itself. The butterfly — a skipper — had brought both wings down so that the

tips nearly touched *beneath* the body. As it hung there, the wings suddenly opened almost horizontally; it was apparently dead. All this took about 1 minute. I collected skipper, ambush bug (*P. hymata*) and flower from near the site of the Haultain elevator, 8 miles south of Saskatoon.^{2 5}

Two days later, September 4, 1974, I was again collecting butterflies, this time on Kernan's Prairie, 2 miles northeast of Saskatoon. In less than 15 minutes, I found three more butter-

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flies, all with their wings turned down and all being held on purple asters by the same kind of bug. The first, a male alfalfa butterfly, was apparently dead. The second, a female cabbage butterfly, moved occasionally; it was being held underneath the body by one of a pair of copulating ambush bugs. The third was also female cabbage butterfly, caught by the side of the head and apparently dead.⁴

The four butterflies and their assassins are shown in Figure 1; closeups of ambush bugs are shown in Figure 2.

The 25 North American species of ambush bugs obtain their food from insects as large as bumblebees and butterflies by lying in wait for them.⁵ They are successful partly because their

small size (1/4-3/8" long) and their camouflage, resulting from the irregular shape of their bodies and by broken colour patterns. Both adults and young ambush bugs grasp their victims with strong front legs. They then pierce them with beaks through which they inject a fluid that usually kills the prey instantly; it may also dissolve the muscles and other internal organs. Then the bugs suck out the body fluids. How much an ambush bug eats in the wild is unknown but each pair of bugs in a cage were supplied four house flies per day.¹ Photographs of ambush bugs feeding on flies appear in two of the books listed below.^{3 6}

While preferring no special colour in flowers, these bugs seem to select those rich in pollen or nectar, or both



Skipper, two cabbage butterflies and an alfalfa butterfly with wings down as they die killed by the five ambush bugs above them. Ruler is in inches and centimeters.

Gary Gent

because of the large numbers of other insects attracted. They are most abundant where such flowers occur in profusion throughout the season, so that on an individual plant or a species tops blooming, neither nymph nor adult will have far to move. Spiders may be the major enemies of ambush bugs.¹

These bugs were near the end of their 1974 life cycle. The females were probably almost finished laying their 50± eggs over a 3-month period, peaking in August and September. The eggs are laid in masses of 10 to 20 on the plants used to trap their prey. The females die within a month of laying their final eggs. While all overwintering is by eggs, embryos begin developing as soon as the eggs are laid but stop at an advanced stage so that they will not hatch until May or June

of the following year. The nymphs, resembling miniature adults, undergo four molts during the 6 weeks it takes them to mature. Within 3 weeks, most adult females begin mating and laying eggs for another generation.¹

¹BALDUF, W. V. 1941. *Life History of Phymata pennsylvanica americana* Merlin (*Phymatidae, Hemiptera*). Ann. Ent. Soc. American 34:204-214.

²BORRER, D. J., and R. E. WHITE. 1970. *A field guide to the insects of America north of Mexico*. Houghton Mifflin Co., Boston. 404p.

³FARB, PETER. 1962. *The Insects*. Life Nature Library. Time Inc., New York. 192 p.

⁴HOOPER R. R. 1973. *Butterflies of Saskatchewan*. Saskatchewan Department Natural Res., Regina. 216 p.

⁵SWAIN, R. B. 1948. *The insect guide*. Doubleday and Co. Garden City, N.Y. 261 p.

⁶TEALE, E. W. 1972. *The junior book of insects*. E. P. Dutton & Co., New York. 266 p.



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NAMES IN NATURE — GERANIUMS AND CRANES — Even the most familiar of the garden flowers may have names which do not seem to explain themselves. Take the geranium, for example. On the surface there may not appear to be close relationship between the geranium and the powerful hoisting cranes used for lifting locomotives and other heavy articles. Consultation with the authorities shows, however, that the flower and the massive mechanical device derived their names from a single source. The origin of “geranium” was the Greek word “geranos”, meaning the “crane” of the Class Birds. The flower took its name from the fact that its seed capsules have a long, projecting beak-described as “a beak-like torus or receptacle around which the seed capsules are arranged.” The resemblance to the beak of a crane causes the geranium to be commonly known as “crane’s bill,” and sometimes as “stork’s bill”. The mechanical “crane” took its name from the resemblance of its long arm to the neck of the bird known as the crane.

From *Nature Magazine*. 1924.

NAMES IN NATURE — BUMBLE-BEE — The name of the common bumble-bee has brought forth many discussions. Some people insist that the word should be “humble-bee”, while others, more precisely scientific, demand “bombus-bee.” There is no reason for the advocate of either spelling to apologize. The bee belongs to the genus *Bombus* and the name of the genus is derived from the Greek “bombos”, translated into English as meaning “a buzzing noise”. Skeat, the distinguished etymologist, defines the bumble-bee as “a bee that hums”, and adds that the verb “bumble” is from the old Dutch “bommelen”, a verb which means to “to buzz”, or “to hum”, and which he says is akin to the word “boom” as applied to a “booming” sound. “As both boom and hum signify to buzz”, explains Skeat, “the insect is called indifferently a bumble-bee or a humble-bee.”

From *Nature Magazine*. 1924.