

# SCORPIONS

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Nature, you know is rather like human society. There is the hard working class represented by the ants and bees, a smart set, and an underworld. The smart, gay set includes the butterflies and birds, some of which indeed are like “a living flash of light.” In contrast to the smart set basking in the sun, the citizens of the underworld keep to dark places and they swoop out, like gangsters, upon innocent victims. Amongst such creatures we find the snakes and spiders. Naturally people tend to dislike such animals, partly because of their stealthy, treacherous way of life, and, partly because people know but little about them owing to their secluded life in hide outs. In many cases, however, these seldom-seen creatures are extremely fascinating.

This article deals with a close relative of the spider, the scorpion. In Jamaica it is a shade of brown or black, several inches in length, with long claws like a lobster, four pairs of walking legs and a jointed flexible tail with a string at the end. Everyone knows and dislikes this creature but few know anything of the life it leads since it nearly always keeps under cover.

Long before man appeared on the earth there were huge scorpions four or five feet long battling in the seas. We know of the existence of these sea scorpions because they have left the hard parts of their bodies preserved in the rocks. I expect many of you know the wet mountain gaps of Jamaica, full of large tree ferns, smaller ferns and ground pines or club mosses - as well as many different kinds of trees with dense luxuriant foliage. Familiarity with these Gaps will help you picture the low-lying swamps of a dim and distant past. These steamy swamps were full of similar, but even more luxuriant vegetation, much of which has been converted into the coal beds of today. It was in the Coal Age that life was trying to establish itself upon the land. Small scorpions related to the sea-scorpions were amongst the invaders and they have persisted until today. The Ancients knew the Scorpion and named a group of stars Scorpio because of the resemblance to one of these creatures. You can see this clearly defined constellation if you look at the southern sky on a summer night.

Today scorpions are to be found all over the warmer parts of the globe. All of them are air-breathers, their ancestors in the sea having long since disappeared. In some parts of the world they are black and yellow, which may be taken as a warning of their ability to defend themselves, and some have stridulating organs which warn one of their presence. Scorpions grow like crabs and caterpillars by shedding their skins - a process known as moulting. Most scorpions feed on small insects but large ones in India and South America also prey upon lizards and mice.

The prey is generally seized, held by the claws and wounded by raising the tail over the head and jabbing the sting into the victim. The pincers are studded with sensitive hairs and when an unwary insect touches these, the trap is sprung. After being subdued by the poison which comes from a pair of poison sacs at the base of the sting the insect is torn to bits and slowly devoured. The effect of the poison on man is

variable but characteristic symptoms are nausea, throbbing pains and a swollen tongue. It is said that after being repeatedly stung man develops a considerable degree of immunity.

**H**enri Fabre has described how the male, walking backwards, leads the female about for a betrothal walk. After many tender caresses during the walk a sheltered nook is chosen for the mating rituals. Thenceforth we find a very different state of affairs for unless the male is a very smart fellow he is devoured by the female. This is an example supporting Kipling's observation that "female of the species is more deadly than the male!"

Many people have seen the young clinging onto the mother's back. I wonder how many have noticed that they are of different sizes. They are! - A fact which goes to show that they are not all born at the same time. Yes, scorpions are born! Instead of laying eggs like their close relative the spider, scorpions bring forth their young alive. The young scorpions cling onto their mother's back and belly and often in such numbers that their parent can scarcely be seen. The mother scorpion does not feed her young, so for short periods they must leave her protection in order to search for food.

There are many superstitions about scorpions and a generally accepted one is that the young suck their mother to death. When we remember that the scorpion moults the traditional belief can easily be explained. What people have undoubtedly seen is an old empty skin from which the scorpion has crawled leaving the young still attached. There is little doubt, however, that the young scorpions prey upon each other, and frequently fall victim to their mother. Many years ago, an early naturalist shut up a

parent with 100 young ones. Very shortly the number of young was reduced to 14. Since the mother scorpion does not eat during moulting but draws upon her fat reserves, it is quite reasonable to suppose that she is quite hungry after the moulting-fast, and feeds on her young. This form of cannibalism is not uncommon in the animal world. The young of many species of aquarium fish must be separated from their parents if they are not to be devoured. Many of you have probably found this out to your cost. After the mother scorpion has moulted, and perhaps even before that, the young ones leave her to lead a separate existence.

**A**nother popular belief concerning these venomous creatures is that when “girt with fire” they commit suicide. It is authoritatively stated that deliberate suicide is anatomically impossible, and even it were the poison would have no effect. In fact, it has been shown that the poison has no effect upon the animal from which it is taken, nor has it any effect upon any other variety of scorpions. The famous Jamaican naturalist, Richard Hill, in 1867, tells how scorpions when placed in a clear vessel in the sun attempt to evade the heat by standing erect. That the scorpion does die when ringed with fire is undoubtedly true, but the cause is most probably desiccation. The appearance of trying to sting itself is a purely automatic action of repeatedly raising the tail over the head to strike at an unseen foe.

When confronted by a scorpion, Jamaicans sometimes call out “Our Father - Our Father” and keep on repeating this until someone has arrived with a pair of scissors to cut it in two. Another effective way of “liquidating” a scorpion is to seize it by the sting and crack it like a whip. This destroys the muscles in the tail so that it cannot strike - that is if you have the courage to do it.

## EDITORS NOTE:

The females of Jamaican scorpions do not devour their mates (Baerg, 1954).

