

spider resembled somewhat an enormous wasp; but far from being dangerous, she had become completely weak and impotent. Before egg-laying these females never assume the terrifying position, and it is only after egg-laying, when the organism has become weakened by the immense drain on its materials, that this bizarre position becomes manifest.

In certain cases, we have been able to provoke the apparition of the terrifying position by causing animals to become fatigued.

A mantis, *Mantis laticollis*, when it is frightened is in the habit of spreading its wings and its anterior extremities, resting on its four posterior legs. It swells its abdomen which at this moment produces two hernias formed by two little sacs placed between the two anti-penultimate abdominal rings. These sacs are of a very striking color. The anterior pairs are dark blue, and the posterior are red. It is not always easy to force the animal to take on this bizarre position. We have succeeded by shaking the animal, by dragging it by one leg, and by brusquely approaching it with the hand when it was on a limb. This position only lasts about thirty seconds and appears to necessitate a great effort. We have fatigued the animal by forcing it to run inside a cage until it was so weak that it could not stand up. It

was then that it assumed the terrifying position, it swelled out its abdomen, and died without changing position.

Similar effects have been observed with flying lizards *Draco volans* and *Draco fimbriatus*. These animals, when pressed, tried to run away; when they were forced to jump they spread out their parachute membranes and vol-planed for a long distance. But finally when over fatigued and when they could no longer run they assumed the terrifying position, opening their mouths and spreading their lateral membranes. When they were still further forced to run and jump they died of fatigue, still holding the terrifying attitude.

From the observations cited, and from others it results that—in the majority of cases the terrifying position is nothing else but a reflex provoked by a general irritation of the entire organism. One cannot exclude the fact that this irritation is provoked by sensations derived through the intermediary of the senses; in these cases the terrifying position has all the appearances of a voluntary action; but the same effect can be obtained by the action of other agents which affect the entire organism (such as fatigue). The terrifying position in our judgment is not a voluntary or conscious action.

SATURDAY AFTERNOON EXCURSIONS FOR 1919.

May 10—Geology; Leamy's Lake, just east of Hull; meet at the end of the Chelsea road electric car line.

May 17—Zoology; Catfish Bay, just west of Hull along the Ottawa; meet at Eddy's office, end of city street car line in Hull.

May 31—Economic entomology; Aylmer Park; by Mr. C. B. Hutchings, Department of Agriculture.

June 7—Ornithology; Beaver Meadow, just west of Hull, along Aylmer road; meet at Eddy's office.

June 14—Zoology; general; across the Gatineau from Gatineau Point; meet the ferry at Rockcliffe Park.

June 21—General; Black Rapids by steamer Wanekewan (consult steamboat time-table—starts

about 1.30 p.m.); a reduced rate for the trip will likely be arranged.

Sept. 20—Fungi and fall botany; Billings' woods; meet at end of Bank street car line on Bank street.

Sept. 27—Ferns and Mosses; woods about three-quarters of a mile east of Billings' Bridge; meet at end of Bank street car line.

The time of meeting at the points indicated will be 2.45 p.m., except in the case of the Black Rapids excursion.

Leaders conversant with the subjects mentioned will be on hand to render assistance.

Local members and any others interested are given a most cordial invitation to attend.