Michigan, sparingly feeding on grass, on which it had also deposited its eggs. Later in the season (July 20), at Fort Gratiot, Michigan, I encountered it in large numbers, in both the larva and perfect states, in the vicinity of potato fields (where it had committed terrible depredations), devouring the younger leaves and flower buds of the common thistle (Cirsium lanceolatum, Scop.), which it was rapidly stripping even to its thick stem so that the entire top of the plant hung down, almost severed. In the same neighborhood I also saw it on pigweed (Amarantus retroflexus L.), hedge mustard (Sisymbrium officinale Scop.), the cultivated oat, smart-weed (Polygonum hydropiper L.), and the red currant and tomato of the gardens, as well as the common night-shade (Solanum nigrum L.), the last two its more legitimate food. But of the last mentioned plants, with the exception of the night-shade, it ate only the young leaves, and of them very sparingly. The thistle it seemed particularly to relish. Could its attention be diverted from the potato to the Canada thistle it would encounter an object worthy of its prowess; and the curses which have been heaped upon its striped back would be turned to blessings. But, I fear, little good can be hoped from the capacity, thus evinced, to diversify its food, and so accommodate itself to circumstances. This can only be regarded as another obstacle in the way of its extermination.

Since writing the above I have found the beetle feeding on the maple-leaved goosefoot (Chenopodium hybridum L.), lamb's quarters (C. album L.), and thoroughwort (Eupatorium perfoliatum L.); and August 8, 1872, I saw it in the larva and perfect states, voraciously eating the black henbane (Hyosciamus niger L.), on which was also to be seen an abundance of the eggs.—Henry Gillman, Detroit, Michigan, September, 1872, in American Naturalist.

The Ant-Lion.—While in the Indian Ladder Region, Albany Co., N. Y., in August, 1871, I found a large colony of ant-lions. It is situated near the head of the "Ladder Road," at the base of the cliffs and extends for several rods along the path to the "Tory House." The cliffs here hang over the paths, so that it is almost impossible for rain to reach the spot. The soil is composed of disintegrated limestone, extremely fine, but mingled with minute fragments of stone as well as larger pebbles.

In Aug., 1871, the colony numbered rather more than 600 individuals, but on July 6, 1872, there were scarcely half that number. Perhaps at

this last date some were in the chrysalis, as of several specimens thus obtained most of them entered that state in a short time, while those taken in August remained until the following spring.

Food was very scarce in this colony, as it was rare to see more than four or five victims in the lions' dens at one time. On several occasions I noticed a strong and active insect, having ventured over the edge of the pit, run swiftly down and up the other side, leaving the ant-lion wildly snapping its jaws, as the intended victim mounted the steep side of the pitfall.

The ant-lion does not, as far as my observation goes, throw up sand to bring down its prey, but throws it up in every direction in order to keep its jaws free to seize the insect when it reaches the bottom of the den.

In 1871 there was another colony (which I did not visit in 1872) near the "Paint Mine." It consisted of some 300 members. I call it a colony, although, of course, there was no friendly intercourse between the inhabitants of the settlement. On the other hand, in the most crowded portions, the chief employment of the insects was to throw out the dirt which their active neighbors were depositing on their own premises.—E. A. BIRGE, Williams College, in *American Naturalist*.

Destruction of Dragon-flies by Birds.—Mr. Gould, in a communication to the Entomological Society of London, says, "I believe that the larger dragon-flies are very liable to the attacks of birds, and have no doubt that the hobby and kestrel occasionally feed upon them; with regard to the small blue-bodied species (Agrionidæ) frequenting the sedgy bank of the Thames, I have seen smaller birds, sparrows, etc., capture and eat them before my eyes, after having carefully nipped off the wings, which are not swallowed. This must take place to a considerable extent, as I have observed the tow-path strewn with the rejected wings."—This has been observed by Mr. J. L. Hersey of New Hampshire (see the following note):—Eds.

BEES AND KING-BIRDS.—For the last ten years I have carefully noted the habits and movements of the king-birds, and have come to the following conclusion, viz.: that they do eat the honey bee, and so does the purple martin; but instead of being destroyed for it, they should be protected and allowed to build their nests near the farm-house, because they drive off the hawks, crows and other plundering birds from the



Birge, E. A. 1873. "The ant-lion." *The Canadian entomologist* 5, 158–159.

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