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ORDWAY
BULLETIN No. 60

located at 9550 Inver Grove Trail (Dakota County Road 77), Inver Grove Heights, Minn.

A SPIDER'S WEB at ORDWAY

It was September and the entire area seemed filled with grasshoppers. The grass was in almost constant motion from their activity, all kinds of them hopping about, particularly when one disturbed the grasses in his walking. At this season they are the unwitting food for many predators but they go about completing their cycle of reproduction so that the next spring, to which they will not survive, will see the advent of more of their kind. One such predator attracted my attention one late afternoon at the edge of the tall grass

The repeated shaking of the grass in the same spot caught my eye and a closer examination revealed a winged grasshopper, probably an American Grasshopper (Schistocerca americana), whose time had run out although he did not yet recognize the fact and was struggling to fly away. While his wings were indeed free, opening and closing in futile efforts to move away, both of his hind legs and a portion of his abdomen were entangled in a spider's web.

The web was a rather sorry example, being far from complete and obviously faulty in its makeup as if its builder had been interrupted before completing his designs. And this probably was just what had happened when the insect intruded into the spider's trap. A closer examination of the web indicated that it was well secured in more than three places on the stems of the taller grasses but the inner weaving had not progressed sufficiently to form its pattern when the grasshopper tumbled into its entangling strands. However, one could see even at some distance the thicker white strands which had been thrown hastily about the legs of the insect by the quick-loving spider. Oh, yes, he was there and was continuing the further ensnaring of his prey. It was as if he realized that the struggling grasshopper was still active and strong enough to break the insufficient strands which were entangling him and he was hastening to bind the captive more securely so that he could not break loose. This he succeeded in doing by incessant thrusts backward toward the insect so that the thread-producing aperture at the end of his abdomen would snag a portion of the insect's body and cause it to be drawn more tightly into a fixed position. Not every one of these thrusts succeeded in catching on the grasshopper's body and even then the thread would sometimes break as the spider drew it tighter. Still, the serious work continued relentlessly and after a period of about a half hour the grasshopper was able only to fan his wings, being otherwise securely contained by the web. The spider at about this time severed one of the large hind legs and proceeded to make a snack of it by sucking out the sustenance therein.

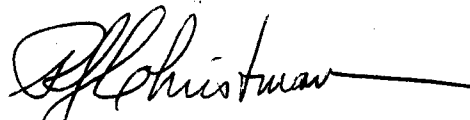
The spider was a Banded Argiope (Argiope trifasciata), one of the Orb-Weavers (Aranidae family) which produce those always-interesting and often-beautiful "classic" spider webs which one sees in the meadows and woods particularly on dewy mornings in the late

summer. It is about 25 mm (1") in length and its back is white with a number of transverse black bands while on its abdomen are two wide longitudinal stripes of yellow against black and a single yellow stripe on the underside of its thorax. From my point of observation its abdomen was uppermost as it thrust toward its victim in reverse lunges; in this position the silk thread-producing orifice was brought near the victim so that it could be ensnared by the emerging thread. In this operation the spider's fourth pair of legs performed the grappling action while the tip of its abdomen, where lie the silk glands, groped for a chance to entangle the thread on the grasshopper's body.

In another hour the spider had resumed its ruthless actions on the disabled prey, turning it over with the first pair of legs and encasing it in silken threads with the fourth pair of legs. This was to become tomorrow's morning meal.

Next morning the remaining drumstick was missing from the insect; the spider basked near the remains in the middle of its now-completed orb from the spokes of which glistened a few dewdrops.

Dec. 13, 1977



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