

OPPORTUNISTIC NOCTURNAL HUNTING
BY *LIBELLULA AXILENA* WESTWOOD (ANISOPTERA: LIBELLULIDAE)

Dragonflies have mainly been studied during diurnal hours and it has been assumed that during periods of darkness most of them remain at rest. Here I report the nocturnal foraging behavior of *L. axilena* during two consecutive nights. On 3 April 1993, after sunset and up to about 21:30 h, I observed an individual (assumed to be the same on both nights) frequent the lighted windows of my residence at the Archbold Biological Station in southcentral Florida, USA. According to S.W. DUNKLE (1989, *Dragonflies of the Florida peninsula, Bermuda and the Bahamas*, Scient. Publ., Gainesville/FL) this should be the southern extremity of the species range. For identification purposes I trapped it on 4 April at 21:30 h when it seemed to have reached its giving-up time, based on the previous day's observations. This behavior of continuing to hunt after sunset is uncharacteristic of this species and illustrates its ability to be opportunistic.

Following my observation of the *axilena* at lighted windows (W1, W2, W3; W2 faces W1 and W3 across a small courtyard), I decided to verify its tracking capabilities and hunting persistence. I switched on the light at W2 and then switched off the light at W1. I observed the dragonfly without movement in the vicinity of the darkened window and then after almost 3 min to fly to the lighted window and continue to hunt. After 15 min at W2, I repeated the procedure, and this time switched on the light at W3, and off at W2. The dragonfly appeared at the lighted window within 2 min and continued to prey on

insects. I repeated this procedure at 08:30 h on 4 April and the dragonfly reacted as in the above-described manner. The distance between W1 to W2 is 2 m, between W2 and W3 2 m, and between W3 and W1 3.5 m.

It appears that the *axilena* was able to discern activity of other insects at the lighted windows and to shift its activity accordingly. It is unclear as to why it took the dragonfly almost 3 min of 'orientation' to move to the lighted window. I was also unable to see any individual of this

species in the open areas and water canals in the vicinity of the house during daylight hours. It is possible that this individual had developed a different hunting technique than its conspecifics and was able to extend its foraging time by preying at the lighted windows of our cabin.

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