

NOTABLE INSTANCES OF AVOIDANCE  
BEHAVIOR IN ODONATA

It is not uncommon to observe dead dragonflies in spider webs (A. KUMAR & M. PRASAD, 1977, *Odonatologica* 6: 19-20; R. RAM & M. PRASAD, 1978, *Notul. odonatol.* 1: 25-26; A. LAROCHELLE, 1978, *Cordulia* 4: 29-34, with references). Although teneral zygopterans are the usual victims, I observed in 1978 two examples of mature, robust anisopterans, *Tanypteryx hageni* (Sel.) and *Gomphus intricatus* Hag., which had died in spider webs. The circumstances of such demises are not known; however, I observed and will describe an unmistakable example of an anisopteran deliberately avoiding a spider web.

*Libellula saturata* Uhler is a common and conspicuous dragonfly in central California. On 18 September 1977 I observed a male perched by a narrow cattail-lined pool near Putah Creek, Yolo County (38° 31' N; 122° 05' W; elev. 55 m). As I approached it flew the length of the pool directly toward a large spider web spanning open water between cattails on each side. It stopped abruptly in front of the web, hovered in an almost vertical position, dropped down about 0.5 m, and flew under the web and away from the pool. There is no question that it had avoided the spider web.

A different type of avoidance behavior was observed with *Zoniagria exclamatoris* (Sel.). I first observed full mature adults at Solano Lake, Solano County, California (38° 29' N; 122° 01' W; elev. 40 m) on April 9, 1978, a rather warm day. One week later I returned to the same area on a cool, breezy, and partly cloudy morning following a day of rain. Much of the vegetation was still wet. The tempera-

ture was about 15°C. *Zoniagrion* was first observed about 11:30 a.m. and only then in sunlit areas protected from the wind. I was attempting to photograph a male perched on a horizontal twig when a cloud obscured the sun. As I approached, the male disappeared from view by moving around to the underside of the perch where it was pressed against the twig. If I moved my hand to one side of the twig, the male would immediately move to the opposite side. This behavior was repeated several times before the specimen was collected by hand. It seems likely that without the heat provided by the sun this individual was unable to fly and was thus avoiding danger by hiding. Although not strictly analogous, a somewhat similar taxis behavior has been reported for *Mecistogaster ornatus* Ramb. (G.H. BEATTY & A.F. BEATTY, 1963, *Proc. N. cent. Brch ent. Soc. Am.* 18: 153-155).

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