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RESEARCH NOTES

NESTS OF *HIBANA GRACILIS* ARE REUSED BY *PHIDIPPUS CLARUS* IN WETLANDS OF NORTHEASTERN KANSAS

Typical nests of wandering spiders consist of small, tightly packed hollow bundles. In these nests spiders molt, retire for part of the day and often lay their eggs (Jackson 1979; Foelix 1982). Nests may be constructed on the ground in natural shelters such as leaf litter or woody debris or within a plant canopy among easily folded leaves or other structures (Johnson 1992).

In wetlands of northeastern Kansas in early May of 1993 and 1994, I found many mating pairs of *Hibana gracilis* (Hentz) (Araneae, Anyphaenidae) within nests made in the small up-

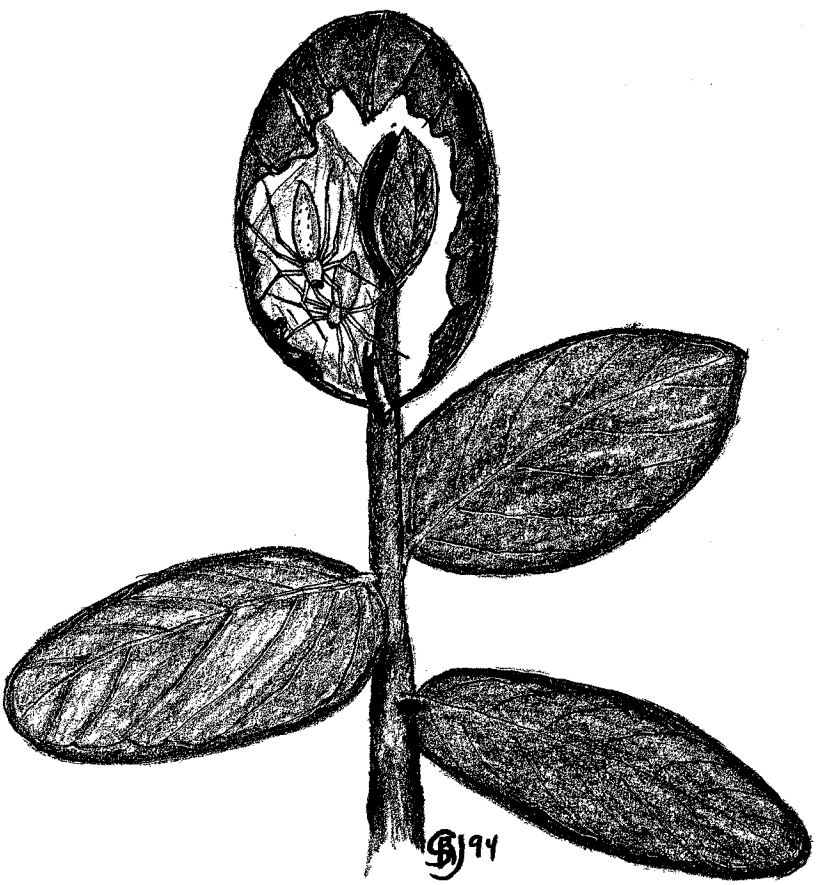

Figure 1.—Mating pair of *Hibana gracilis* (Araneae: Anyphaenidae) in the uppermost expanded leaves of the milkweed plant.

permost expanded leaves of common milkweed (*Asclepias syriaca*) and sullivant's milkweed (*A. sullivantii*) (Fig. 1). Because these milkweed species may be more common in annually burned wetlands (Johnson & Knapp, in press), I quantified the density and diversity of *H. gracilis* nests in three annually burned wetlands. Each wetland was approximately 350–500 m^2 in area and contained approximately 5.4 *A. syriaca* or *A. sullivantii* stems/m^2 (Johnson, in press). *Hibana gracilis* nests were found on 72% of milkweed stems in 40 plots, making nest density among milkweed in these wetlands 3.88 nests/m^2. Nests were observed in this density on either *A. syriaca* or *A. sullivantii* depending on which species was more centrally located within wetlands. Otherwise, *H. gracilis* nests were found within basal leaf sheaths of prairie cordgrass (*Spartina pectinata*) in a density of 0.4 nests/m^2 (n = 30 m^2 plots of *S. pectinata*).

By late May, *H. gracilis* had abandoned most nests; but the majority of these nests were reoccupied by *Phidippus clarus* Keyserling (Araneae, Salticidae). In the same three wetlands described above, 64% (n = 40) of former *H. gracilis* nests in milkweed stems were occupied by a female or a pair of *P. clarus*. Furthermore, these nests did not appear to have been altered in any way from the original structures made by *H. gracilis*. By mid-June 1994, *P. clarus* had also abandoned these milkweed leaf nesting sites.

This pattern of nest reuse represents an interesting interaction between wandering arachnids and may be linked to 1) shortage of suitable nesting sites, 2) reoccupation of optimal nest sites, or 3) silk conservation. Young milkweed plants may represent ideal nesting sites which are shared by sympatric arachnids with similar hunting methods and prey choices, but allochronic mating periods.

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