

Location of Tunnels on Goldenrod Ball Galls Made by Downy Woodpeckers, *Picooides pubescens*

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ABSTRACT

Downy Woodpeckers (*Picooides pubescens*) predominantly excavate larvae from goldenrod ball galls by locating the epidermal cap at the surface of the tunnel made by the *Eurosta solidaginis* larva, and enlarging it.

DISCUSSION

The predatory activities of Downy Woodpeckers (*Picooides pubescens*) on goldenrod ball galls (McAtee, 1933; Uhler, 1951; Fischer, 1974; and Terres, 1980) can be readily observed in the field. There is disagreement among researchers as to the bird's method of tunneling into the gall in order to excavate the larva of *Eurosta solidaginis*. Uhler (1951) states that the woodpecker makes its tunnel into the central cavity of the gall at random, while Fischer (1974) suggests that it locates the epidermal cap at the end of the tunnel produced by the *E. solidaginis* larva, and enlarges this tunnel to gain access to the larva in the central cavity.

On March 27, 1989 goldenrod ball galls (N=88) were collected in Sylvan Island Park, Moline, Rock Island County, Illinois. Careful examination indicated that 72 (82%) were enlarged tunnels at the epidermal cap, and 16 (18%) were made from other directions. These observations seem to indicate that the predators predominantly enlarge existing tunnels, supporting the observations of Fischer (1974).

LITERATURE CITED

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