
RUBY-CROWNED KINGLET IMPALED ON GREENBRIAR THORN

CLIFFORD E. SHACKELFORD* and JULIE K. SHACKELFORD

Texas Parks and Wildlife, 3000 IH-35 South, Suite 100, Austin, Texas 78704 (CES)
American Farmland Trust, 101 Uhland Rd., Suite 205, San Marcos, Texas 78666 (JKS)
*Correspondent: clifford.shackelford@tpwd.state.tx.us

While on a Texas Ornithological Society field trip on 8 November 1997 we, and ca. 20 other birdwatchers, encountered a strangely behaving ruby-crowned kinglet (Regulus calendula) just below the Lake Tawakoni spillway, Van Zandt Co., Texas. At ca. 0900 h, a female kinglet was observed as it vigorously and unsuccessfully tried to free itself from a fixed point ca. 20 m from our trail’s edge. Upon closer inspection, the bird was seen danging by its right wing (Fig. 1), which was impaled by a thorn on a greenbriar vine (Smilax) ca. 2.5 m above the ground. After less than 1 min of observing the struggle, the first author entered the woods to free the bird. Upon approach, the kinglet’s efforts to escape became much more vigorous and it suddenly freed itself, flew into the woods, and was not seen again.

A review of the literature yielded no published accounts of accidental, self-impaling by birds on thorns, though there are several reports of birds being impaled on barbed-wire fences (McNicholl 1979; Avery et al., 1980). There are accounts, however, of over a dozen species of birds from hummingbirds to small passerines being entangled in a variety of plants, especially burdock (Arctium). The ruby-crowned kinglet has been found on numerous accounts entrapped in burdock (Wright, 1984; Zimmer and Kantrud, 1987; McNicholl, 1988, 1994; Grass, 1994). Golden-crowned kinglets also have been documented on several occasions caught in burdock (Bowdish, 1906; Needham, 1909; Tozer and Richards, 1974; Dawe, 1975; Humphreys, 1975; Kubisz, 1989).

Graves (1998) provides an account of one of the heaviest species of bird to be caught in a plant: a Swainson’s thrush (Catharus ustulatus) held by the wings in a seed pod of enchanter’s nightshade (Circaea quadrivalvata). However, Bond (1960) reported likely the heaviest bird to be caught in a plant in that a pearly-eyed thrasher (Margarops fusca) in the Virgin Islands was found struggling with its tail entangled in the rough leaves and stems of a sedge (Scleria lithosperma). Other examples of birds trapped in plant species include ruby-throated hummingbird (Archilochus colubris) caught in thistle (Cirsium; Tyler, 1940), in stickseed (Lappula schinata; Mospop, 1959), and in burdock (Ralph, 1988). A calliope hummingbird (Stellula calliope) was found entangled in grass barbs (Setaria verticillata; Tucker, 1955). There are also separate incidences of a house wren (Troglodytes aedon) and a ruby-crowned kinglet entangled in beggar’s lice (Hacklelia virginiana; Hampson, 1970).

Our account appears to be the first documented case of self-impalement of a bird on a thorn, thus adding Smilax to the list of plants that may occasionally pose a threat to small birds (M. McNicholl, pers. comm.). According to the references cited in this account, such hazards are usually fatal. It was likely that our bird had been impaled for only a brief time because small birds with a high metabolism.

Associate Editor was Stanley F. Fox.
(like a ruby-crowned kinglet) weaken quickly when struggling (Gill, 1990). It was also likely that our attempt to free this bird caused the increased activity that allowed it to escape.

\textit{Resumen}—Hay relativamente pocos informes publicadas que se tratan de pájaros enredados o atrapados en vegetación donde no se pueden liberar. Describimos un encuentro con un \textit{Reyuzelo Sencillo} (\textit{Regulus calendula}) que pareció estar empalado en una espina de la planta zarzaparrilla durante los fines del otoño en la parte noreste de Texas.

M. Lockwood and C. Farquhar provided helpful comments on an earlier draft of this short note. Later reviews by M. McNicholl, J. Ingold, and an anonymous reviewer were extremely helpful; we appreciate their constructive and useful comments. M. Araujo and E. Armitano graciously assisted with the Spanish summary.

\textbf{Literature Cited}


Tyler, W. M. 1940. Ruby-throated hummingbird.

FIG. 1—Live ruby-crowned kinglet impaled through its wing on a \textit{Smilax} vine. Original artwork by senior author.
Supplemental feeding has gained widespread popularity as a big-game management tool to alleviate seasonal nutrient deficiencies (Hubert et al., 1980; Zaiglin and DeYoung, 1989; McBryde, 1995). Before implementing this management option, landowners and managers should be aware of the potentially significant loss of supplemental feed by non-target animals. We studied the effects of supplemental feeding on white-tailed deer (*Odocoileus virginianus*) in central Texas. An additional objective of that study was to document use of supplemental feed by species other than deer.

Our study areas were located on the Rex Kelly (29°48'N, 99°35'W), Lazy Lane (30°04'N, 99°20'W), and Los Manzanos (30°04'N, 99°15'W) ranches in Kerr and Bandera counties, Texas ($\bar{x} = 434$ ha). Wildlife, topography, and vegetation were typical of central Texas. Each study area was supplied with ad libitum amounts of Trophy Factors Deer Pellets (Concho Feed Mill, Eden, Texas) from April 1989 through March 1991. Guaranteed analysis of feed was crude protein $\geq 18\%$, crude fat $\geq 2.3\%$, and crude fiber $\leq 6.0\%$. Bulk creep feeders (317.5 kg capacity) containing 2 feed troughs were located throughout the ranches at a density of 1 feeder/100.2 ha. Feeders were enclosed within a 167-m$^2$ area with 1-m net wire fencing to exclude domestic livestock and feral hogs (*Sus scrofa*).

Five and 11 feeders were observed for single 24-h periods (4- to 6-h shifts) during August and September 1990 (autumn) and February and March 1991 (spring), respectively, to estimate number and species of animals visiting the feeders. Length of visits and time spent consuming feed were recorded. All animals entering the fenced area were counted, whether feed was consumed or not. Although all animals were counted and included in our estimates of visits per day, times could not be obtained for all individuals due to multiple animals in the feed areas or multiple animals simultaneously consuming feed.

Consumption rates for individual animals also were measured during autumn and spring. Consumption rate measurements were taken following completion of the 24-h observation periods. Feed trays containing measured amounts of feed were placed in both sides of feeders such that access to all other feed was restricted. Amount of feed consumed was measured immediately after an animal finished consuming feed and left the area. Visits judged to be interrupted by our presence near feeders were not included in analysis.

Exotic ungulates were seldom observed at feeders at any time of the year. Perimeter fencing appeared effective in excluding domestic livestock, feral hogs, mouflon sheep (*Ovis aries*), and blackbuck antelope (*Antilope cervicapra*). One aoudad sheep (*Ammotragus lervia*) and 2 axis deer (*Axis axis*) entered the feed stations during the observation periods. Combined average length of visits ($\bar{x} = 14.5 \pm 8.6$ min) were similar to those for white-tailed deer.