

**EASTERN BOX TURTLES (*Terrapene carolina*)
FEEDING ON TV TOWER-KILLED BIRDS**

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ABSTRACT

The Eastern Box Turtle (*Terrapene carolina*), is a proven scavenger (Anderson, 1965; Carr, 1952; Pope, 1960). Observations in the field have established that freshly killed birds are eaten by this turtle. A search of the literature indicates no prior evidence of avian flesh as being known to constitute a part of this animal's diet in the wild.

THE OBSERVATION

On the morning of 8 October 1969, the authors obtained information which showed Eastern Box Turtles (*Terrapene carolina*) to be feeding on the carcasses of tower-killed birds. The "kill" occurred the night of 7-8 October at the WBIR-TV tower (height, 533.4 meters) atop Zachary Ridge, elevation 395.9 meters, in the northeastern corner of Knox County, Tennessee. This date marked the first tower-kill (death of the birds as a result of flying into the tower structure) for the migration season, which occurred during a night of low visibility and intermittent rain. Between 200 to 300 dead and injured birds were collected the morning of 8 October, which was clear with temperatures about 20°C.

While in the process of searching for the downed birds in the deciduous woodlands immediately surrounding the tower, a male Eastern Box Turtle about 15 centimeters long (plastron measurement) was found near the partially devoured body of a Swainson's Thrush (*Catharus ustulata*). The carcass was so close to the turtle's head that it was felt that the reptile must have been responsible for the missing meat which had been torn away even though the actual feeding had not been observed.

During the course of the collecting, it was noted that many invertebrates, principally centipedes, ants, and beetles, were feeding on the birds. Several other box turtles were also seen as the search to pick up bird bodies in the wooded area continued. However, none was observed near, or feeding on the dead birds until approximately 2 hours after finding the first turtle. At this time a second male of about the same size was sighted feeding on a dead Gray-cheeked Thrush (*Catharus minima*). The appearance of the bird's remains was strikingly similar to that of the first carcass. Sizable chunks of meat, approximately 10-15 mm square, were removed as the turtle ate.

The Eastern Box Turtle is a proven scavenger (Anderson, 1965; Carr, 1952; and Pope, 1960) and is reported as a possible predator on the nestlings and eggs of groundnesting species (Allard, 1948; Barker, 1964). It has fed on frozen bird flesh under laboratory conditions (Rodeck, 1948). We believe, however, this constitutes the first evidence of the Eastern Box Turtle as a scavenger on avian flesh in the wild.

LITERATURE CITED

- Allard, 1948. Jour. Tenn. Acad. Sci., 23:307-321; and, 24:146-152.
Anderson, Paul. 1965. The Reptiles of Missouri. Univ. of Mo. Press, Columbia, Mo.
Barker, Will. 1964. Familiar Reptiles and Amphibians of America. Harper and Row, N.Y.
Carr, Archie. 1952. Handbook of Turtles, Turtles of the United States. Comstock Association Publishers. Ithaca, N.Y.
Pope, Clifford H. 1960. The Reptile World. Knopf Publishers, N.Y.
Rodeck. 1949. *Copeia*, 1949 (1):32-34.

**ADDITIONS TO THE LIST OF PLANTS OF THE GORGES
AT FALL CREEK FALLS**

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ABSTRACT

Six taxa are added to the list of plants known to be present in the gorges of the Fall Creek Falls State Park. They are *Dryopteris Goldiana* (Hook.) Gray, *Iris cristata* Ait., *Cypripedium acaule* Ait., *Tipularia discolor* (Pursh) Nutt., *Asarum Ruthii* Ashe, and *Delphinium tricornis* Michx. forma *albiflora* Millsp.

INTRODUCTION

An annotated list of the plants of the system of gorges at the Fall Creek Falls State Park was published in 1955 (Caplenor 1955). The list was prepared as a result of a vegetational analysis, and no attempt was made to seek out and catalog an inclusive list of taxa. To the present time no such study has been attempted. Interest in the vegetation of the gorges of the Cumberland Plateau has steadily increased, partly as a result of public fascination with wild areas and partly because these gorges have become recognized as refugia for numbers of northern taxa. Literature on botanical aspects of the region is still sparse. Much of the work that has been done (Clark 1966, Safley 1970, Sherman 1958) has not been published. Some that has been published has not included the herbaceous taxa (Quarterman, Turner, and Hemmerly 1972) or has included only the most obvious or indicative taxa (Braun 1950). In view of all of these considerations, it seemed appropriate to make available a list of taxa which have been observed in the gorges since the publication in 1955. A complete survey of the flora of the gorges of the whole plateau area needs to be made. Information on grasses, sedges, and composites is particularly incomplete. Since all of the species in the addendum are rare in the particular situations, none were collected as whole specimens.

Nomenclature follows Fernald (1950).

ADDITIONAL TAXA

POLYPODIACEAE

Dryopteris Goldiana (Hook.) Gray Rare and scattered, Mixed Mesophytic Community.

IRIDACEAE

Iris cristata Ait. Scattered patches near Cane Creek. Mixed Mesophytic Community.

ORCHIDACEAE

Cypripedium acaule Ait. Five or more flowering plants of this taxon were seen during the spring of 1977 south of the confluence of Cane and Piney Creeks, Mixed Mesophytic Community. These are almost surely newly adventive to the site since they are such obvious plants and since none had ever before been encountered in the gorges at Fall Creek Falls. They are abundant on the undissected plateau surrounding the gorges.

Tipularia discolor (Pursh) Nutt. Rare, Mixed Mesophytic Community.

ARISTOLOCHIACEAE

Asarum Ruthii Ashe A few plants of this taxon are located on the southeast slope of the ridge extending northeasterly from the overlook above the confluence of Cane and Piney Creeks. Mixed Mesophytic Community, dry habitat.

RANUNCULACEAE

Delphinium tricornis Michx. forma *albiflora* Millsp. In the 1955 report *D. tricornis* was reported as "Rare. Mostly present in rich mixed mesophytic stands only." In the spring of 1977, the taxon, including the white form, was one of the most noticeable plants on the northeast-facing slope of the Cane Creek Gorge in the best developed Mixed Mesophytic Community.

LITERATURE CITED

- Braun, E. Lucy. 1950. *Deciduous Forests of Eastern North America*. The Blakiston Company, Philadelphia. 596 pp.
Caplenor, Donald. 1955. An Annotated List of the Vascular Plants of the Gorges of the Fall Creek Falls State Park. *Jour. Tenn. Acad. of Sci.* 30: 93-108.
Clark, Ross C. 1973. Vegetation of the Fiery Gizzard Gorges. Unpublished manuscript.
Fernald, M. L. 1950. *Gray's Manual of Botany*, 8th ed. American Book Company. New York. 1632 pp.
Quarterman, Elsie; B. H. Turner and T. E. Hemmerly. 1972. Analysis of Virgin Mixed Mesophytic Forests in Savage Gulf, Tennessee. *Torrey Bot. Club Bull.* 99: 228-232.
Safley, John Marcus. 1970. Vegetation of the Big South Fork Cumberland River, Kentucky and Tennessee. M. S. thesis. University of Tennessee, Knoxville. 148 pp.
Sherman, H. A. 1958. The Vegetation and Floristics of Five Gorges of the Cumberland Plateau. M. S. thesis. University of Tennessee, Knoxville. 103 pp.