

## STATUS OF THE BLACK BEAR IN TENNESSEE

VINCENT SCHULTZ

*Virginia Polytechnic Institute, Blacksburg, Virginia\**

This paper is an attempt to bring up to date information on the black bear (*Ursus americanus americanus* Pallus) in Tennessee. Current literature, Hamilton, (1943) and Burt and Grossenheider (1952), shows the bear as distributed throughout the Unaka Range of eastern Tennessee. The only current reports of Kellogg (1939) also pertain to this region, especially in the Great Smoky Mountains. Ganier (1928) states that, "black bear are still taken in 'The Wilderness,' (apparently he is referring to Fentress County) though further south through the Cumberlandlands they are no longer to be found. In West Tennessee no bear have been reported in recent years, and it is unlikely that a single specimen is now living in this area where it was originally so abundant. Among the Great Smoky and other mountain chains along the eastern border bear are regularly reported and taken each season." Caldwell *et al.* (1947) believe that the bear has been extirpated in West Tennessee and that a few remain in the "gullfs" of White and Van Buren counties. They also mention that probably as many as 1500 are present in the Cherokee National Forest and Great Smoky Mountain National Park. The bear was listed by them as last known in West Tennessee in Lauderdale County (1895), Middle Tennessee in Wayne County (1905), East Tennessee in Cumberland County (1937), and still found in the Unaka Range.

Lack of specific information on the distribution of the mammals of Tennessee made it necessary that the Tennessee Game and Fish Commission conduct a statewide wildlife survey in order to instigate a sound game management program for the State. Primary field work for this project was begun in September, 1950, and was completed approximately 13 months later. The survey procedure which has been described by Schultz (1952, 1954) was primarily a personal interview survey based on acceptable sampling methods. A total of 3,560 farmers (a relative sampling error of 1.47 per cent) were sampled and personally interviewed concerning their knowledge of the black bear and other native fauna in the State. Conservation officers were interviewed by postal questionnaire and project personnel made special attempts to obtain information from "wilderness areas" in the Cumberland Plateau and Unaka Range. As a result of the scarcity of the black bear in Tennessee, reports other than actual observations of respondents are presented but these should be considered with care, especially in regions such as West Ten-

\*Current address: Dept. of Biostatistics, Johns Hopkins Univ., Baltimore 5, Md.

nessee, where the bear apparently has been absent for years. These hearsay reports were requested for the respondent's home county.

For purposes of study, data were tabulated on a basis of 15 farming-types (Schultz, 1954). Bear were reported as occurring on farms of 16 of the 3560 respondents as follows: 12 of the 131 respondents in farming-type 15 (Unaka Range) reported bear on their farms; 3 of the 862 respondents in farming-type 14 (Valley of East Tennessee); 1 of the 137 respondents in farming-type 12 (Cumberland Plateau). These reports were from the following counties: Blount, 2; Carter, 1; Cocke, 3; Polk, 1; Scott, 1; Sevier, 7. Undoubtedly the relative lack of farms in the Unaka Range and Cumberland Plateau restricts greatly the reports from these two areas.

Personal observations of bear reported by respondents who had seen them elsewhere than on their farms were: 2 reports in Shelby County (1946, 1949), Shelby Forest Park; 1 in Cumberland County (1922), vicinity of Smith Chapel; 1 in Anderson County (1950), vicinity of Norris Dam; 2 in Scott County (1950), 1 in vicinity of Winfield and other unknown; 1 in Rhea County (1949), vicinity of Lorraine.

The following hearsay reports of bear were received from respondents. The omission of a date in the listing indicates that no date was obtained from the respondent but, in general, the writer believes such hearsay reports are current. 1 report—Anderson County, 1950, Norris Dam; 1 report—Bledsoe County, 1950, vicinity of Litton; 4 reports—Blount County, vicinity of Louisville (1 report in 1947), Cades Cove (1 report in 1935), Great Smoky Mountain National Park (2 reports); 3 reports—Carroll County, vicinity of Hopewell Church (1 report in 1951), vicinity of Hopewell Church (2 reports); 5 reports—Carter County, Laurel Fork Creek (1 report in 1951), vicinity of Carter (1 report), Pond Mountain (1 report), Iron Mountain (1 report), vicinity of Elk Mills (1 report); 1 report—Cheatham County, vicinity of Ashland City; 2 reports—Claiborne County, Lone Mountain (1 report in 1947), Cumberland Plateau (1 report in 1951); 1 report—Cumberland County, vicinity of Big Lick (1 report in 1946); 5 reports—Fentress County, Crooked Creek (1 report in 1922), vicinity of Pall Mall (1 report in 1931), "wilderness area" (1 report in 1939), Pickett State Park (1 report in 1948), unknown (1 report in 1951); 1 report—Franklin County, Cumberland Plateau near Sewanee; 5 reports—Greene County, vicinity of Greystone (1 report in 1949), vicinity of Greystone (1 report in 1951), vicinity of Cedar Creek (1 report in 1951), vicinity of Cedar Creek (2 reports); 1 report—Grundy County, vicinity of Altamont (1 report in 1936); 1 report—Hancock County, Powell Mountain (1 report in 1951); 2 reports—Haywood County, north of Hillville in Hatchie River bottoms (1 report in 1950), Hatchie River bottoms near the Tipton-Haywood County line (1 report in 1951); 1 report—Hickman County, vicinity of Aetna (1 report in 1949); 1 report—Humphreys County, Blue Creek; 1 report—Jefferson County, English Mountain; 2 reports—Johnson County, four miles north of Mountain City (1 report in 1946), Stone Mountain (1 report); 2 reports—Knox County, vicinity of Flenors Mill (1 report in 1950), vicinity of Flenors Mill (1 report); 1 report—Lauderdale County, Fort Pillow Prison Farm (1 report in 1936); 1 report—Loudon County, vicinity of Burtons Mill (1 report in 1950); 6 reports—Monroe County, Tellico Plains Wildlife Management Area; 1

report—Rhea County, vicinity of Iron Hill (1 report in 1950); 1 report—Roane (or Morgan) County, Walden Ridge near Harriman (1 report in 1950); 1 report—Scott County, vicinity of Norma (1 report in 1941); 2 reports—Sequatchie County, west of Cartwright (1 report in 1935-40), west of Daus (1 report in 1948); 8 reports—Sevier County, English Mountain (2 reports in 1950), Great Smoky Mountain National Park (6 reports); 2 reports—Sullivan County, vicinity of Indian Springs (1 report in 1949), Cherokee National Forest (1 report); 10 reports—Tipton County, vicinity of Drummonds (1 report in 1949), north of Charleston in Hatchie River bottoms (1 report in 1951), vicinity of Solo (2 reports in 1951), eight miles east of Covington (2 reports in 1951); 1 report—Unicoi County, Unicoi Wildlife Management Area; 1 report—Warren County, Cumberland Plateau.

Although these hearsay reports should be considered with care, it should not be assumed that hearsay reports of this nature are worthless. Experience on the Tennessee survey has shown that they are quite reliable especially when more than one report from an area occurs. Undoubtedly a memory bias is present in both personal observations and hearsay reports but the abundance of current reports indicates that the bear is increasing in the state.

In an attempt to insure a complete coverage of "wilderness areas," interviewers contacted persons other than those on sampling areas; these areas included the Cumberland Plateau, portions of the western Highland Rim and Unaka Range. Disregarding the type of report, bear were reported in the Unaka Range as follows: Carter County, Iron Mountain; Johnson County, Gentry Creek and Taylors Valley; Polk County, Turtle-town Creek, Big Lost Creek, Little Lost Creek, Butler Fields; Unicoi County, Rock Creek, Martin Creek (1920), Unaka Springs. With the exception of Martin Creek where bear were reported as present in 1920, all reports are reports of bear during the last few years. In the Cumberland Plateau reports were as follows: Anderson County, Charley's Branch; Bledsoe County, Big Brush Creek; Campbell County, Stinking Creek (1900); Fentress County, Brooks Creek (1932), Jim Creek; Marion County, Racoon Mountain; Morgan County, between Petros and Wartburg; Pickett County, Pickett State Park; Scott County, Pine Creek (1915), Buffalo Creek, Jellico Creek, Pickett State Park (1942); Sequatchie County, Big Brush Creek; Warren County, High Rock (1930). In the western Highland Rim only one hearsay report of bear was obtained, on Indian Creek in Wayne County. Unless indicated the year of presence can be considered as within a five year period preceding the survey.

A questionnaire sent to conservation officers requested that they indicate the status of the bear as either common, rare, or absent in their assigned counties. In all counties except the following 12 they were listed as absent. These 12 counties are: Blount, common in county; Carter, Laurel Fork Wildlife Management Area; Cocke, common in county; Fentress, on Kentucky state line near Pickett State Park; Greene, on mountains; Maury,

west of Mt. Joy; Monroe, Tellico Plains Wildlife Management Area; Polk, Ocoee Wildlife Management Area; Sevier, common in county; Unicoi, Unicoi Wildlife Management Area; Van Buren, Cane Creek Gulf; Washington, Rich Mountain. Where specific locations are given the bear was reported as rare in the county.

It is apparent from these data that the primary Tennessee range of the black bear is the Unaka Range with the secondary being the Cumberland Plateau. Apparently the bear is fairly common in the Unaka Range and rare in the Cumberland Plateau. With proper protection in the latter region, the bear may again become an important constituent of the fauna of this region. It is difficult to ascertain whether or not the black bear is present in the bottoms of the Mississippi River and its tributaries but it is not in the realm of an impossibility.

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#### NEWS OF TENNESSEE SCIENCE

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C. S. Shoup of the Atomic Energy Commission, and C. D. Curtis and Merlin D. Peterson of Vanderbilt were featured as symposium leaders.

Attendance at the American Museum of Atomic Energy in Oak Ridge passed the 400,000 mark on September 3. The museum was opened March 19, 1949.

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