

Results of this investigation indicate the value of cellulose acetate electrophoresis in the taxonomic classification of the genus *Roccus*. Hybridization may also be detected by this method.

Although the identification of the individual serum protein fractions was beyond the scope of this study, future work in this area should include the identification of the individual serum protein fractions and a comparative study of fish serum protein fractions with the serum protein fractions of other related vertebrate groups.

ACKNOWLEDGEMENTS

The writers wish to express their appreciation to Mr. Gordon G. Petit, Mr. Larry C. Jobe, Mr. David Bishop and their associates of the Tennessee Game and Fish Commission for assistance in this investigation.

LITERATURE CITED

- Bailey, Reeve M., 1960. *A List of Common and Scientific Names of Fishes from the United States and Canada*. Second Edition. American Fisheries Society Special Publication No. 2.
- Lillevik, H. A. and Schlomer, C. L., 1961. Species differentiation in fish by electrophoresis analysis of skeletal muscle protein. *Science* 134: 2042-2043.
- Robert, E. and Tsuyuki, H., 1965. Zone electrophoretic comparison of muscle myogens and blood proteins of artificial hybrids of *Salmonidae* with their parental species. *Journal of the Fisheries Research Board of Canada* 22: 882-886.
- Rolan, Robert G., 1968. Electrophoretic comparison of human and catfish plasma proteins. *Transactions of the American Fisheries Society* 97: 455-456.
- Tsuyuki, H., 1966. Inter-species relationships within the genus *Oncorhynchus* based on biochemical systematics. *Journal of the Fisheries Research Board of Canada* 23:101-104.
- Tsuyuki, H., 1968. Contribution of protein electrophoresis to rockfish (*Scorpaenidae*) systematics. *Journal of the Fisheries Research Board of Canada* 25: 2471-2501.

JOURNAL OF THE TENNESSEE ACADEMY OF SCIENCE

Volume 46, Number 2, April, 1971

MYOTIS LEIBII LEIBII IN THE GREAT SMOKY MOUNTAINS NATIONAL PARK

HANS N. NEUHAUSER
University of Georgia
Athens, Georgia 30601

ABSTRACT

Myotis leibii leibii is reported for the first time from the Great Smoky Mountains National Park. Records for this species from south of Tennessee's northern border are rare, and are confined to mountainous regions.

At 2030 hours on 24 April, 1970, I observed a bat hawking about two to three meters above ground in Porters Flat, Greenbriar Cove, Sevier County, Tennessee, within the borders of the Great Smoky Mountains National Park. Porters Flat is a small field in a second-growth cove hardwood forest, with an approximate elevation of 675 meters. The bat flew through an open door of a hiking cabin where it was collected from a wall in the attic. I have identified the specimen (Univ. of Georgia no. 2887) as a female Small-footed Myotis, *Myotis leibii leibii* (Audubon and Bachman). Judging from the fusion of epiphyses, the bat was an adult; no embryos or placental scars were visible under 30X magnification.

Chiggers were collected from the posterior margins of the ears and given to Dr. D. A. Crossley of the Univ. of Georgia, who identified them as *Trombicula (Leptotrombidium) myotis* Ewing.

Myotis leibii is a rare bat in the eastern United States (Barbour and Davis 1969); in the southeast it is even rarer. With the above record, only twelve specimens have been reported from south of Tennessee's northern border. All of these were taken from mountainous regions in eastern Tennessee (Tuttle 1964; present specimen), western North Carolina (Adams 1950, Schwartz 1954), and northern Georgia (Baker 1967). This species has not previously been reported from the Great Smoky Mountains National Park (Linzey and Linzey 1968).

LITERATURE CITED

- Adams, D. A. 1950. *Myotis subulatus leibii* in North Carolina. *J. Mamm.* 31 (1): 97-98.
- Baker, W. W. 1967. *Myotis leibii leibii* in Georgia. *J. Mamm.* 48(1): 142.
- Barbour, R. W., and W. H. Davis. 1969. *Bats of America*. The Univ. Press of Kentucky, Lexington. 286 p.
- Linzey, D. W., and A. V. Linzey. 1968. Mammals of the Great Smoky Mountains National Park. *J. Elisha Mitchell Sci. Soc.* 84(3): 384-414.
- Schwartz, A. 1954. A second record of *Myotis subulatus leibii* in North Carolina. *J. Elisha Mitchell Sci. Soc.* 70(2): 222.
- Tuttle, M. D. 1964. *Myotis subulatus* in Tennessee. *J. Mamm.* 45(1): 148-149.