piece-meal ownership of remnants. Much more is remaining in a low use, because of poor roads, lack of power and telephones, and lack of organization among owners of remnant land in promoting a developmental program.

Rate of population adjustment to outside employment opportunities through migration has been slow. This is due in part to a mountain-yeoman complex which makes for stability of residence. The geographic distance from this area to the industrial north has been more effectively transcended by the migrants than has been the social distance.

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The effects of radiation on parasites and their hosts are being studied by Dr. Arthur W. Jones and Dr. Honorico Ciordia of the University of Tennessee Zoology Department under a $7600 Atomic Energy Commission contract with the University. Dr. Jones and Dr. Ciordia are collaborating with Lt. Col. Bernard F. Trum of the Oak Ridge Experiment Station. The parasite selected for study is *Taenia pisiformis*, a tapeworm commonly found in dogs and rabbits. Since the tapeworm is constantly growing and reproducing it offers unusual advantages for studying growth and reproduction processes under controlled conditions.

The workshop in Conservation Education at the University of Tennessee, begun in the summer of 1953, was continued in the summer of 1954 for in service elementary and secondary public school teachers. The workshop was conducted by Dr. Fred H. Norris of the Botany department and Dr. W. W. Wyatt of the College of Education. The state Department of Conservation and the state Department of Fish and Game cooperated in this project. Field trips were made to Copper Hill and the Coweeta Hydrologic Research Station near Dillard, Georgia, and two weeks were spent camping at Big Ridge.

Dr. A. J. Sharp, head of the Department of Botany at the University of Tennessee, was a member of the staff of the University of Michigan Biological Station, Douglas Lake, Michigan, during the summer, 1954.

Dr. Alexander Hollaender, director of the Biology Division of the Oak Ridge National Laboratory, Dr. J. S. Kirby-Smith, also of the Division, and Dr. J. Gordon Carlson, consultant to the Division and head of the Department of Zoology and Entomology at the University of Tennessee, participated in the International Congress of Photobiology held in Amsterdam, The Netherlands, August 23-28, 1954; they took part in a symposium, "The Effect of Nonionizing Radiations on Genetic Elements of Cells." They also presented papers at the Symposium of Radiobiology in Liege, Belgium, August 30-September 1. Dr. Hollaender discussed "Studies on the Mechanism of the X-Ray Protection of E. Coli by Cysteamine." Dr. Kirby-Smith's topic was "The Relative Effectiveness of Various Ionizing Radiations on Chromosome Breakage in Tradescantia." Dr. Carlson discussed "The Relation of Dose and Mitotic Stage at Treatment to X-Ray-Induced Stickiness of Chromosomes."

An initial grant of $5200 has been awarded to Dr. H. A. Smith and Dr. C. A. Buehler of the University of Tennessee Chemistry Department by the United States Public Health Service to conduct research on the preparation of new compounds for possible use as antispasmodics, antihistamines and other medicinals.

Dr. R. R. Overman, professor of clinical physiology and director of the section of clinical physiology at the University of Tennessee Medical Units, has been awarded research grants totaling $67,749. Of this amount, $27,000 has been contributed by Memphis Maternal Welfare League, the University and the city of Memphis to provide equipment and nursing care for an eight-bed metabolic unit in the John Gaston Maternity Hospital. In this maternal

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