

ordination of the system's environmental education program, the creation of this unusual position is a first for school systems in Tennessee.

INTRODUCTION

The need for a Teacher-Naturalist and an environmental education program, as the Kingsport School System views it, is that responsibility for the present state of the environment must rest primarily with the existing adult generation. In the past, environmental education has been delegated to resource people such as Naturalists or Conservation Educators or taught as the last chapter in a textbook. This conventional approach no longer meets today's educational needs.

ENVIRONMENTAL EDUCATION PROGRAM

Recognizing the role and responsibility of public schools in meeting these needs, Kingsport City Schools began planning in early 1970, for a total environmental education program spanning all grade levels. As one phase of the program, Kingsport students participate in the newly established program offered by Bays Mountain Nature Preserve, a 1300 acre semi-wilderness, natural watershed area and park, owned and operated by the City of Kingsport. Though employed as a teacher with the school system, the Teacher-Naturalist serves as an interpretative naturalist while presenting environmental interpretative programs at various community resources—thus the title Teacher-Naturalist.

Immediately responsible to the Assistant Superintendent in charge of Curriculum and Instruction, the Teacher-Naturalist has been charged with planning and coordinating the total environmental education program of the school system. Basic to the total program is the utilization of community resource facilities ranging from sewage treatment plants in the inner city to natural or wilderness areas in the rural environment. Supplementing this use of community resource facilities is the assistance obtained from community resource

consultants and cooperating resource agencies such as the Soil Conservation Service and the Tennessee Valley Authority. The Teacher-Naturalist serves as the liaison agent between the school system and these resource facilities and consultants.

COMMUNITY RESPONSIBILITIES

Included in the total program are the many meaningful educational experiences relating to the activities preceding and following the utilization of community resources. One of the prime responsibilities of the Teacher-Naturalist is, therefore, to plan, develop and implement pre-trip and post-trip activities for visits to community resource facilities. This may take the form of developing materials, assisting teachers, or visiting classrooms and conducting activities. Additional duties include planning and developing of environmental study areas on individual school sites, preparation and submission of proposals for federal environmental education grants, development and implementation of environmental education in-service programs, assisting school librarians in increasing the supply of environmentally related literature, and serving as general science consultant to all city schools.

Though the long range goal of both is the same, the duties of the Teacher-Naturalist in the Kingsport System varies greatly from those of the traditional Conservation Educator or Naturalist. By beginning early in the educational program to include a curriculum which will provide an awareness and functional knowledge of the total environment, subsequent generations may be equipped with the skills and necessary learning to cope with the staggering environmental problems now facing man.

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FIRST OCCURRENCE OF *RHABDOMETRA ODIOSA* IN BOBWHITE QUAIL IN TENNESSEE

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ABSTRACT

The occurrence of *Rhabdometra odiosa*, Leidy 1887 in bobwhite quail (*Colinus virginianus*) in Tennessee is reported. Six of 140 birds examined contained the cestode.

INTRODUCTION

The object of this paper is to report the occurrence of *Rhabdometra odiosa*, Leidy 1887 in bobwhite quail

(*Colinus virginianus*) in Tennessee. A recent report (Kellogg 1969) indicated that *R. odiosa* had previously been found in quail from Florida, Georgia, Mississippi, North Carolina, and Texas.

METHODS

A sample of 140 quail collected on the Ames Plantation, a Field Station of the University of Tennessee Agricultural Experiment Station at Grand Junction, was

examined for the occurrence of gizzard and intestinal helminth parasites. Birds were collected during March through September, 1967 and January, 1968 through January, 1969.

RESULTS AND DISCUSSION

Twelve birds (8.5%) contained cestodes belonging to the genera *Rhabdometra* or *Raillietina*. Six of these birds were infected with *Rhabdometra odiosa*, with a range of one to nine cestodes per bird. Three other birds were infected with cestodes belonging to the genus *Rhabdometra*, but species identification was not accomplished. The remaining three quail were harboring *Raillietina*, some individuals of which were identified as *R. cesticillus*.

R. odiosa is found only in quail and is generally thought to be a native quail parasite. Jones (1931)

stated that it is associated with quail living far from human influence. *Raillietina cesticillus*, however, infects poultry, pheasants (*Phasianus colchicus*), coturnix quail (*Coturnix coturnix*), and other fowl, as well as bobwhite quail. *Rhabdometra odiosa* and *Raillietina cesticillus* were never found in the same host individual, suggesting that a competitive relationship may exist between the two cestode species.

LITERATURE CITED

- Jones, Myrna F. 1931. Cestodes (Tapeworms) in quail. Pp. 297-310. In H. L. Stoddard (Editor), *The bobwhite quail: its habits, preservation and increase*. Charles Scribner's Sons, New York. 559 p.
- Kellogg, F. E. 1969. Parasite and disease studies on Southeastern game birds. Unpublished Doctoral dissertation, University of Georgia, Athens. 80 p.

PEABODY TO HOST SCIENCE LEADERSHIP DEVELOPMENT PROGRAM

George Peabody College for Teachers will host a Science Leadership Development program beginning September 1973 for experienced teachers and first-year graduate students who want to become teachers. The program is the only one of its type in the State of Tennessee and one of only 23 in the Nation to receive NSF support. Metropolitan Nashville Schools in which graduate students will serve internships for certification and the Science Division at Peabody are cosponsoring the experimental program. In addition to Leadership Development training, participants will have an opportunity to earn a graduate degree and secondary science certification.