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PARASITES OF WATERFOWL FROM SOUTHWEST TEXAS: I. THE NORTHERN CINNAMON TEAL, *Anas cyanoptera septentrionalium*

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Abstract: Seventeen northern cinnamon teal, *Anas cyanoptera septentrionalium* were collected in Hudspeth County, Texas: 10 in January, 1974, and seven in September, 1974. Fifteen parasite species were recovered: 11 were new host records. Three species of parasites were recorded from spring migrants and 15 from fall migrants.

INTRODUCTION

The northern cinnamon teal, *Anas cyanoptera septentrionalium*, is a sub-species native to western North America. The bird is an early fall and spring migrant. Although not abundant, some utilize the Rio Grande Valley in El Paso and Hudspeth Counties, Texas, on their annual migrations.

Not much is known about parasites of waterfowl in the Southwest and even less about the parasites of the northern cinnamon teal. McDonald[3,4,5,6] and Larios[2] have published references to parasites from this duck.

MATERIALS AND METHODS

Seventeen cinnamon teal were collected in the Rio Grande Valley, Hudspeth County, Texas; 10 spring migrants returning from the South in January, 1974, and seven fall migrants in September, 1974. Ducks were placed in individual plastic bags and on ice immediately after collecting. Those that could not be examined within six hrs were frozen and examined later.

Trematodes, cestodes, and acanthocephalons were fixed in Alcohol-Formalin-Acetic Acid, stained in Harris' hematoxylin, and mounted in Canada balsam. Nematodes and ectoparasites were preserved in 70% ethanol and mounted in lactophenol and Hoyer's, respectively.

RESULTS AND DISCUSSION

All 17 northern cinnamon teal were infected with at least one species of parasite. Of the 15 species of parasites recorded only three were recorded from the spring migrants while all 15 were recorded from the fall migrants.

The most common parasites were *Cloacotaenia megalops* (88%), *Echinostoma revolutum* (47%), and *Tricholbilharzia physellae* (41%), (Table 1).

Data presented by Buscher[1] for the blue-winged teal (*Anas discors* L.) and Turner and Threlfall[7] for the blue-winged teal and green-winged teal (*Anas crecca* L.) indicated that the juvenile ducks were infected with more species of helminths than the adults. The fall cinnamon teal in our study consisted of one adult and six juveniles. Although the sample was small, the greater number of species of parasites observed in the fall migrants may have been influenced by the preponderance of juveniles.

All parasites recorded in this study have been reported from various species of North American ducks, but 11 are new host records for cinnamon teal.

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TABLE 1. Parasites of the Northern Cinnamon Teal, **Anas cyanoptera septentrionalium,** from Southwest Texas.

	Spring (10 Ducks) No. Infected	Fall (7 Ducks) No. Infected
TREMATODA		
**Echinostoma revolutum*	6	2
Notocotylus attenuatus	—	2
**Trichobilharzia physellae*	4	3
**Bilharziella polonica*	—	2
CESTODA		
Cloacotaenia megalops	8	7
**Microsomacanthus hopkinsi*	—	2
**Sobolevicanthus filumferens*	—	1
**Echinocotyle* sp.	—	1
**Diorchis nyrocae*	—	3
NEMATODA		
Capillaria anatis	—	2
Streptocara crassicauda	—	1
ACANTHOCEPHALA		
**Corynosoma constrictum*	—	1
**Fillicollis anatis*	—	2
MALLOPHAGA		
**Trinoton querqueduale*	—	3
**Anaticola crasicornis*	—	1

*New host records.

LITERATURE CITED

1. BUSCHER, H. N. 1966. Intestinal helminths of the blue-winged teal, *Anas discors* L. at Delta, Manitoba, Can. J. Zool. 44: 113-116.
2. LARIOS, I. 1944. Description de un Cestoda del Genero *Hymenolepis* Encontrado en los Patos Silvestres del hago de Texcoco, Mexico. An. Biol. Inst. Univ. Nac. Mexico 15: 73-78.
3. McDONALD, M. E. 1969. Annotated Bibliography of Helminths of Waterfowl (Anatidae). Bureau of Sport Fisheries and Wildlife. Special scientific report. Wildlife No. 125. Washington, D.C.
4. ————. 1969. Catalog of Helminths of Waterfowl (Anatidae). Bureau of Sport Fisheries and Wildlife. Special scientific report. Wildlife No. 126. Washington, D.C.
5. ————. 1974. Key to Nematodes Reported in Waterfowl. Department of the Interior, Bureau of Sport Fisheries and Wildlife. Resource Publication 122, Washington, D.C.
6. ————. 1974. Nematode Parasites of Waterfowl (Anseriformes) from Western United States. U.S. Fish and Wildlife Service. Bear River Research Station. 19 p.
7. TURNER, B. C. and W. THRELFALL. 1976. The metazoan parasites of green-winged teal (*Anas crecca* L.) and blue-winged teal (*Anas discors* L.) from Eastern Canada. Proc. Helm. Soc. Wash. 42: 157-159.

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