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SOME HELMINTH PARASITES OF THE AMERICAN BALD EAGLE

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Abstract: Bald eagles *(Haliaeetus leucocephalus)* found dead or moribund in the United States and Canada and submitted to Patuxent Wildlife Research Center were examined for helminth parasites. Nine genera of helminths were reported which include new host records for *Clinostomum complanatum, Neogogatea pandionis, Centrorhynchus* sp., *Serratospiculum amaculata, Capillaria contorta,* and *Habronema americanum.*

INTRODUCTION

The American bald eagle *(Haliaeetus leucocephalus)* has shown a dramatic decline in numbers over the last two decades throughout the continental United States. A great deal of attention has been focussed on the importance of pesticide poisoning and other factors which have contributed to mortality and reduced fecundity.[8,9,2,11] Few reports are available on the helminth parasites of this North American bird, perhaps because of its general decline in numbers and intensified protection in recent years.

MATERIALS AND METHODS

Fifty-nine eagles, found dead or moribund in the United States and Canada and submitted to Patuxent Wildlife Research Center were examined for helminth parasites. These eagles were collected between 1963 and 1971. Because of the condition of the birds upon receipt and the variable care afforded the birds prior to arrival, no attempts could be made to determine prevalence or degree of infection.

RESULTS

Nine genera of helminths (four trematodes, one cestode, one acanthocephalan, and four nematodes) were recorded from the eagles examined (Table 1). *Clinostomum complanatum, Neogogatea pandionis, Centrorhynchus* sp., *Capillaria contorta, Habronema americanum,* and *Serratospiculum amaculata* are reported here for the first time from this host. Although this is the first report of these genera from bald eagles, many of them have been previously reported from European and Asian eagles and a number of other raptors.[10,6,5,7]

DISCUSSION

The exact role of helminths in raptor populations is not clear. It appears that birds subjected to greater than normal stresses, hand reared birds, and captive birds are more susceptible to parasitic infections and other environmental and biological insults than are birds from wild populations.[10,4,3] Although no evidence of pathogenicity or mortality could be directly attributed to the helminths recovered in this study, pathogenicity has been previously reported for *Serratospiculum amaculata* by Bigland et al.,[1] and esophageal capillarids by Cooper[3] and Trainer et al.,[12] in other raptors.

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TABLE 1. Helminths found in North American bald eagles.

Parasite	Collection location	Age	Sex	Necropsy diagnosis	Date
Trematoda					
Clinostomum complanatum	Minnesota	fledgling	F	enteritis emaciation	1972
Phagicola longus	North Carolina	2 years	F	gunshot	1965
Neodiplostomum banghami	Arkansas	adult	M	none	1963
	Iowa	immature	M	gunshot	1966
Neogogatea pandionis	Iowa	immature	M	gunshot	1966
	Massachusetts	immature	F	gunshot	1966
	Wisconsin	immature	M	none	1966
Acanthocephala					
Centrorhynchus sp.	Maine	adult	F	none	1967
	Florida	immature	F	gunshot	1971
	Iowa	immature	F	gunshot	1966
	New Jersey	adult	F	none	1963
Cestodes					
Cladotaenia banghami	Minnesota	immature	M	beating	1968
	Idaho	immature	M	impact injuries	1968
	Florida	immature	F	gunshot	1971
	Minnesota	immature	F	impact injuries	1968
	Wisconsin	immature	M	gunshot	1968
Nematodes					
Contracaecum sp.	New Jersey	adult	F	none	1963
	Minnesota	immature	F	neck fracture	1969
	South Dakota	immature	M	gunshot	1968
	Illinois	immature	F	gunshot	1971
	Minnesota	adult	M	impact injuries	1969
	Wisconsin	adult	F	pesticide poisoning (Dieldrin)	1968
	South Dakota	adult	F	gunshot	1968
Habronema americanum	Minnesota	immature	F	impact injuries	1967
	Iowa	adult	F	none	1971
	Illinois	immature	F	gunshot	1970
	Wisconsin	immature	M	gunshot	1969
	Illinois	immature	F	none	1967
	Minnesota	immature	F	impact injuries	1967
Serratospiculum amaculata	Wisconsin	immature	M	gunshot	1969
	Illinois	immature	F	gunshot	1971
Capillaria contorta	Iowa	immature	F	strangled	1967
	Missouri	immature	F	gunshot	1969
	Minnesota	immature	F	gunshot	1966
	Wisconsin	adult	M	none	1965

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