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# *Cryptocotyle lingua* INFECTION IN A BALD EAGLE *(Haliaeetus leucocephalus)*

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*Abstract:* Approximately 11,000 heterophyid trematodes, *Crytocotyle lingua,* were recovered from the small intestine of a bald eagle, *Haliaeetus leucocephalus,* in Nova Scotia. Severe emaciation of the eagle was attributed to the heavy burden of trematodes. The wide distribution of this trematode in the Maritime area and the fact that fish are a primary source of food for eagles in Nova Scotia might be predisposing factors in this case.

## CASE REPORT

In April, 1975, the emaciated frozen carcass of a mature bald eagle, *Haliaeetus leucocephalus,* was submitted to the Animal Pathology Laboratory, Sackville, New Brunswick, after a taxidermist reported that the bird was very thin. The eagle had been found dead on the shore of Northumberland Strait near Pictou, Nova Scotia. The history indicated that an eagle had been observed flying in that locality on the previous day. Examination of the carcass did not reveal lesions or injuries other than extreme emaciation. Parasitologic examination of the intestinal tract was carried out by vigorous washing of the mucosa and passage of the washings and intestinal contents through a sieve with openings of 0.210 mm. Approximately 11,000 *Cryptocotyle lingua* were recovered from the small intestine.

## DISCUSSION

In the absence of lesions or other findings, the emaciation was attributed to the heavy *C. lingua* infection. Soulsby[5] reported that a marked enteritis occurs where large numbers of this trematode accumulate within a short period of time.

Cameron[1] noted that of all the flukes carried by saltwater fish, *C. lingua,* originally of European origin, was the trematode of greatest importance in Eastern Canada. It is extremely common in gulls and other fish-eating seabirds and in certain carnivorous mammals such as dogs and foxes.[5] The author has previously found this species in small numbers in a herring gull *(Larus argentatus)* taken on Prince Edward Island and in a red-throated loon *(Gavia stellata)* from Nova Scotia (unpublished data) and in nine of 61 red foxes *(Vulpes vulpes)* originating in widely separated areas of New Brunswick and Nova Scotia.[4] Threlfell[6] reported a relatively low prevalence of *C. lingua* in gulls in Newfoundland. He attributed this to the fact that capelin *(Mallotus villosus)* and American sand lances *(Ammodytes americanus),* on which gulls feed extensively, have not been recorded as intermediate hosts of *C. lingua.*

While few reports are available on the parasites of bald eagles, a recent study of 59 from various regions in North America did not indicate the presence of *C. lingua.*[3] Heavy infection in an eagle from Nova Scotia might be attributed to two predisposing factors. Firstly, *Cryptocotyle* appears to be widely distributed in the Maritime area.[1,4] Cameron[1] observed that any species of marine shore fish probably would be a suitable host for this trematode. Secondly, Gitten[2] in 1968 reported that fish were the primary food of bald eagles in Nova Scotia during spring, summer and fall.

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