



NOTES ON PARASITES OF THE LONG-BILLED CURLEW, *Numenius americanus*, FROM EASTERN NEW MEXICO

Authors: BUTLER, WELDON F., and PFAFFENBERGER, GARY S.

Source: Journal of Wildlife Diseases, 17(4) : 537-538

Published By: Wildlife Disease Association

URL: <https://doi.org/10.7589/0090-3558-17.4.537>

BioOne Complete (complete.BioOne.org) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at www.bioone.org/terms-of-use.

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

NOTES ON PARASITES OF THE LONG-BILLED CURLEW, *Numenius americanus*, FROM EASTERN NEW MEXICO

WELDON F. BUTLER and GARY S. PFAFFENBERGER,[□] Natural History Museum, Eastern New Mexico University, Portales, New Mexico 88130, USA.

Abstract: Two long-billed curlews (*Numenius americanus* Bechstein) were collected near Elida, Roosevelt Co., New Mexico. Two species of endoparasites were recovered, the cestode *Choanotaenia numenii* Owen, 1946 and the acanthocephalan *Mediorhynchus papillosus* Van Cleave, 1916. Three mallophagan species, *Cummingsiella longistricola* (Wilson, 1937), *Austromenopon crocatum* (Nitzsch, 1866) and *Lunaceps numenii numenii* (Denny, 1844), were also recovered. All represent new distribution records while *M. papillosus* and *L. numenii numenii* also represent new host records.

INTRODUCTION

Literature pertaining to the parasites of the long-billed curlew (*Numenius americanus* Bechstein) is essentially nonexistent. The most exhaustive treatment was that of Dronen and Badley.¹ They reported nine species of trematodes recovered from the long-billed curlew along the Texas gulf coast area. In addition, they published a very helpful list of all the digenetic trematodes recovered from hosts belonging to the genus *Numenius*. Because of the paucity of available literature, little is known about the distribution of parasites of this host. Two trematodes are known to be rather widely distributed,⁶ while one cestode species,⁵ one species of mite,⁴ and two species of lice^{1,7} are known only from Nebraska, Sonora Mexico and Texas, respectively.

CASE REPORT

Two long-billed curlews, collected as fresh road kills, were bagged and frozen separately. Ectoparasites, obtained by brushing the feathers with a stiff bristled brush, were temporarily stored in 70% ethanol, soaked in 10% KOH for 24 h, and

mounted in Euparal. All internal organs and body cavities were examined for helminths. Endoparasites were stored in AFA fixative, stained with Harris' hematoxylin, and mounted in Canada balsam.

Three species of Mallophaga were the only ectoparasites recovered. These were *Cummingsiella longistricola* (Wilson, 1937), *Lunaceps numenii numenii* (Denny, 1842), and *Austromenopon crocatum* (Nitzsch, 1866). Although exact counts were not maintained, all three species of lice were recovered from both hosts. *Cummingsiella longistricola* had been previously taken from the long-billed curlew in Texas.⁷ New geographic records are established for all three mallophagan species, while new host records are established for *L. numenii numenii* and *A. crocatum*.

Two helminths were recovered from the small intestine of both hosts. Although exact numbers were not maintained, they included a cestode (*Dictyometra numenii* Clark, 1952) and an acanthocephalan (*Mediorhynchus papillosus* Van Cleave, 1916). The cestode had been previously reported

[□] Author to whom reprint request should be addressed.

from the same host,² but represents a new distribution record, while new host and distribution records are established for *M. papillosus*.

DISCUSSION

Complete host lists for each of the parasite species have been compiled and are retained by the junior author. They reveal that the acanthocephalan seems to demonstrate minimal host specificity

as indicated by the fact that the 25 reported hosts are distributed among 16 different families. Such host diversity is, however, not shared by the Mallophaga and cestode. Host citations, for the latter organisms, indicate host generic specificity, whereas the greatest host specificity is demonstrated by the mallophagan and cestode (*C. longistricola* and *C. numenii*) where each has only been reported from the long-billed curlew.

LITERATURE CITED

1. CARRIKER, M.A. Jr. 1956. Report on a collection of mallophaga largely Mexican (part II). Florida Entomol. 39: 19-43.
2. CLARK, D.T. 1952. Three new dilepidid cestodes, *Dictymetra numenii* n. gen. n. sp.; *Dictymetra paranumenii* n. sp. and *Anomotaenia filovata* n. sp. Proc. Helm. Soc. 19: 18-27.
3. DRONEN, N.O. Jr. and J.E. BADLEY. 1979. Helminths of shorebirds from the Texas gulfcoast. I. Digenetic trematodes from the long-billed curlew, *Numenius Americanus*. J. Parasit. 65: 645-649.
4. LOOMIS, R.B. 1966. A new species and new records of the genus *Tori trombicula* (Acarina, Trombiculidae) from birds of Sonora Mexico. J. Parasit. 52: 768-771.
5. OWEN, R.L. 1946. A new species of cestode, *Choanotaenia numenii*, from the long-billed curlew. Trans. Am. Micro. Soc. 65: 346-350.
6. STUNKARD, H.W. 1916. Notes on the trematode genus *Telorchis* with descriptions of new species. J. Parasit. 2: 57-66.
7. WILSON, F.H. 1937. A new species of *Philoptyrus* (Mallophaga) from the long-billed curlew. Can. Entomol. 69: 264-266.

Received for publication 1 April 1981