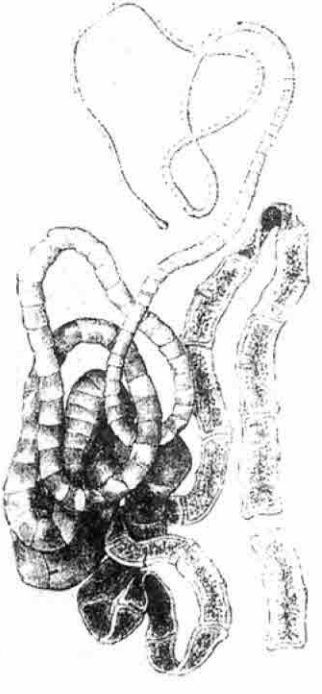
The Helminthological Society of Washington

683rd Meeting
Program and Abstracts



March 28th & 29th, 2003

Gettysburg College

Gettysburg, Pennsylvania

8 A New Interpretation of Ovejector Structure in Hookworms (Nematoda:Strongylida:Ancylostomatoidea)

J. Ralph Lichtenfels, Parasite Biology, Epidemiology & Systematics Laboratory, USDA, ARC Beltsville, Maryland

The 23 genera and subgenera of hookworms include some of the most important nematode parasites of man and domesticated animals. Considerable research on a molecular phylogeny i underway, but a morphological phylogeny is lacking. The ovejector has been demonstrated to be a useful organ for understanding relationships among taxa of the Strongylida. However, phylogenetic use of ovejectors is hampered by problems of homology and terminology of parts Our knowledge of ovejectors of hookworms has been based on a study of *Ancylostoma duodenale* by Looss in 1905, who described a large, muscular infundibulum, a long, knobbed sphincter, and a short vestibule. In contrast, the present study of 7 species of hookworms foun a common structural pattern including: 1) a tiny infundibulum; 2) a muscular, flask-shaped sphincter; and 3) an elongate vestibule. The new interpretation of ovejector structure of hookworms is more compatible with that of related Strongylida.

9 Current Status of Research on the Helminth Fauna of wild Ungulates in Ukraine

Vitaliy A. Kharchenko, I. I. Schmalhausen Institute of Zoology of the National Academy of Sciences of Ukrain, Kyiv, Ukarine

There are eight species of wild ungulates in Ukraine. Research on their helminths occurred in conjunction with the development of an intensive game-hunting industry. Nearly 100 species of helminths of wild ungulates have been registered in Ukraine. Because natural environments of Ukraine are similar to those of neighboring countries, the similarity of helminth faunas can be expected. However, there are only a few works on this subject in Ukraine. We know a little about peculiarities of life cycles of helminths of wild ungulates in Ukraine and their relations with hosts. All this points to a need for further research and a consideration of the prospects of funding it.

10 Gregarine Parasites of West Virginia Mosquito Larvae

Jessica Honaker, Marshall Universtiy, Huntington, West Virginia

A total of 2,732 *Ascogregarina barretti* individuals were collected from three mosquito species *(Ochlerotatus triseriatus, Oc. atropalpis* and *Culex restuans*) in south central West Virginia. Collections were made from June through October of 2002. The highest prevalence (93%) was found in *Oc. triseriatus*; the lowest (at 0%) was recorded for *Cx. restuans*. Prevalence of infection was highest in June.

11 Endohelminths of Basses in River and Reservoir Ecosystems

J. M. Rodebaugh and J. A. Bradbury, Marshall Universtiy, Huntington, West Virginia

Two hundred and fifteen basses representing 5 species were collected from selected river and reservoir sites in West Virginia from May through November, 1997. Basses harbored 16 parasite taxa (4 Digenea, 4 Cestoda, 5 Nematoda and 3 Acanthocephala) in their visceral organs. *Proteocephalus* sp. pleurocercoids, *Rhipidocotyle papilosa, Neoechinorhynchus cylindratus, Spinitectus carolini* and *Camallanus oxycephalus* were the most commonly encountered helminthes. *Spiroxys* sp. *Echinorhynchus salmonis* and *Pomphorhynchus bulbicoli* were found only in river hosts, whereas *Pisciamphistoma stunkardi, Bothriocephalus* sp., *Proteocephalus ambloplitis* adults, *Hysterothylacium* sp. and *Neoechinorynchus cylindratus* infected only reservoir hosts.