

ALIMENTARY PARASITES OF FELIS DOMESTICA.

BELOW are given the records of the kind, location and extent of the intestinal parasitism of several specimens of *Felis domestica* examined at Meadville, Pa., during the year ending June, 1906. Only three species of parasites were found: *Ascaris mystax*, *Tænia crassicolis* and *Dipylidium caninum*. The two species of tapeworms were identified by Professor H. B. Ward, of University of Nebraska.

TABLE 1.

	No. of Subjects.	Subjects Affected.	Not Affected.	No. of Parasites Found.			
				Total.	Average.	Max.	Min.
A. mystax.....	13	9	4	134	15	37	2
T. crassicolis..	17	5	12	13	2.6	5	1
D. caninum.....	17	3	14	28	9.3	16	5

Table 1 gives a general record of the extent of parasitism. This shows that parasites are abundant in *Felis domestica*. It will be seen

TABLE 2.
Detailed Record of Infection of Twelve Individuals.

Subject.	Kind of Parasite.	Age of Subject.	Total.	Stomach.	Duodenum.	Jejunum.	Ileum.	Large Intestine.
1 ♂	A. mystax. T. crassicolis. D. caninum.	sleek, full grown.	0 5 0	0 0 0	0 0 0	0 0 0	0 5 0	? ? ?
2 ♀	A. mystax. T. crassicolis. D. caninum.	sleek, full grown.	11 0 0	0 0 0	9 0 0	2 0 0	0 0 0	? ? ?
3 ♀	A. mystax. T. crassicolis. D. caninum.	scrawny, $\frac{2}{3}$ grown.	16 0 0	0 0 0	14 0 0	2 0 0	0 0 0	? ? ?
4 ♀	A. mystax. T. crassicolis. D. caninum.	scrawny, old. grown.	0 3 0	0 0 0	0 0 0	0 0 0	0 3 0	? ? 0
5 ♂	A. mystax. T. crassicolis. D. caninum.	scrawny, full grown.	22 0 0	2 0 0	18 0 0	2 0 0	0 0 0	0 0 0
6 ♀	A. mystax. T. crassicolis. D. caninum.	$\frac{2}{3}$ grown.	37 0 0	3 0 0	22 0 0	4 0 0	2 0 0	6 0 0
7 ♀		sleek, full grown.	No parasites found.					
8 ?	A. mystax. T. crassicolis. D. caninum.	$\frac{1}{2}$ grown.	2 0 0	0 0 0	2 0 0	0 0 0	0 0 0	0 0 0
9 ♂	A. mystax. T. crassicolis. D. caninum.	large, sleek, butcher's cat.	20 1 0	0 0 0	17 0 0	3 1 0	0 0 0	0 0 0
10 ♀	A. mystax. T. crassicolis. D. caninum.	? ?	12 0 0	2 0 0	9 0 0	0 0 0	0 0 0	1 0 0
11 ♀	A. mystax. T. crassicolis. D. caninum.	scrawny, $1\frac{1}{2}$ year.	3 0 16	0 0 0	3 0 0	0 0 0	0 0 16	0 0 0
12 ♂	A. mystax. T. crassicolis. D. caninum.	old, pet.	11 0 0	1 0 0	9 0 0	0 0 0	0 0 0	1 0 0
Totals.	A. mystax. T. crassicolis. D. caninum.		134 9 16	8 0 0	103 0 0	13 1 0	2 8 16	8 0 0
Grand Total.			159	8	103	14	26	8?

that 88 per cent. of all the subjects examined were infected by some one of these parasites and that 76 per cent. of all the subjects infected were infected by *Ascaris mystax*.

Table 2 gives a detailed record of the age and sex of each subject and the location and extent of the parasitism.

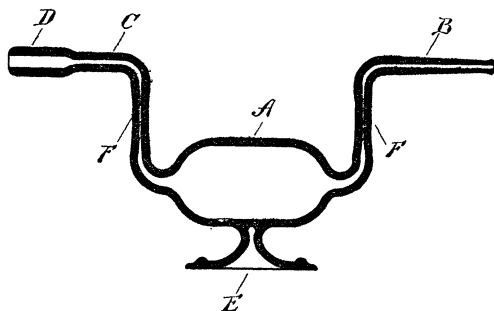
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AN IMPROVED PYKNOMETER.

IN the course of investigation into the function of the bones of the middle ear there was occasion to determine the specific gravity of those ossicles and their constituent parts. The parts are very small, so that the most suitable method for determining their specific gravities seemed to be that employed by Hammerschlag for determining the specific gravity of a drop of blood.

The specific gravity of methylene bromide, which is greater than that of bone, was gradually reduced by adding ether to it, until the piece of bone under investigation which had been dropped into this solution, remained suspended therein. At this point the specific



gravity of the particle of bone was, of course, the same as that of the solution, which latter was then determined.

I attempted to use the pycnometer with a perforated stopper to obtain equal quantities of the solution and of distilled water for the purpose of comparing their weights; but found the instrument unsatisfactory for exact determinations.

The water did not overflow the stopper as readily as the solution, forming a much larger

cap over the perforation so that an equal quantity of water and of methylene bromide could not be obtained. Furthermore, during the necessarily slow process of careful weighing, three to four mg. of the solution would evaporate. Besides, unless special care was taken, a rising temperature would cause the contents to overflow.

To obviate these difficulties, I designed a pycnometer here illustrated in vertical section.

The cylindrical body or bulb, of convenient size *A*, is provided at one end with a capillary inlet—outlet tube or arm *B*, bent as shown; at the other end with a similar tube or arm *C*, having a mouthpiece *D* for drawing in and blowing out the liquid. The arms *B* and *C* are marked as at *F, F*; the whole is mounted on a suitable base such as *E*; by drawing in or blowing out, the exact quantity of liquid can readily be obtained; the lumen of the arms at the marks *F, F* may be extremely narrow and a perfect gauge of quantity be thereby had; no attention need be paid to changes in temperature after the pycnometer is once filled; the lumen being narrow and the arms long, what little evaporation might possibly take place is beyond detection; the instrument is conveniently cleaned and dried by rinsing it with a volatile solution and then passing an air current through it.

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CURRENT NOTES ON METEOROLOGY.

THE CYCLONE OF SEPTEMBER 22-28, 1905, IN
THE PHILIPPINES.

THE *Bulletin* of the Philippine Weather Bureau for September, 1905, lately received, contains an excellent account of an important tropical cyclone which swept over the Philippines from the twenty-second to the twenty-eighth of that month, over a belt more than a hundred miles wide. This cyclone has been given the name *Cantabria*, after one of the vessels which was wrecked by the storm. The place of origin seems to have been in long. 142° E., and lats. 11°-12° N., between the islands of Guam and Yap. It moved west to Samar, and then northwest to the mainland,