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## SOME PARASITES OF CROWS OF CENTRAL OKLAHOMA (Preliminary Report)

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Fifty crows (Corvus brachyrhynchos) from the vicinity of Norman and Oklahoma City were examined for parasites, in the fall of 1932. Examinations were made for both external and internal parasites. Thorough examinations were made of all regions of the alimentary tract, respiratory tract, urinary tract, heart, blood, feces and body cavity. Protozoan parasites are not discussed in this report.

Parasites found were grouped as follows: four species of Arthropods; six species of Nematodes, and two unidentified Nematodes; two species of Cestodes and two unidentified Cestodes.

Preparation of specimens:

Blood smears were stained with Wright's blood stain. Fecal smears were stained with Heidenhain's hematoxylin, destained in picric acid and mounted in balsam.

Cestodes were prepared by flattening the worms between two slides and killing in hot 5 per cent formalin. They were then changed to 5 per cent aceto-formal (5 per cent formalin plus 2 per cent glacial acetic acid) for one hour, washed in water for one-half hour, stained overnight in Delafield's hematoxylin plus .01 per cent aceto carmine, washed in water, dehydrated in 15 per cent, 30 per cent and 50 per cent alcohol, destained in 70 per cent acid alcohol (3 per cent hydrochloric acid) until a pale pink color was obtained. They were then changed to 80 per cent alkaline alcohol and let remain until a pale blue color was obtained. The worms were next placed between two micro slides and bound with a rubber band, dehydrated in 80 per cent, 90 per cent, 95 per cent and absolute alcohol for one hour in each grade. Cleaned in xylo-alcohol for one-half hour, pure xylol for one hour and mounted in balsam.

Preparation of Nematodes: Nematodes were killed in hot 70 per cent alcohol, placed in pure glycerine and allowed the glycerine to evaporate for one week, and mounted in glycerine jelly (240 gram of water, 5 of borax, 25 of glycerine and 40 of gelatin).

Preparation of Arthopods: Arthopods were killed in hot water, cleared in 10 per cent potassium hydroxide for two days (mites one day), washed in water for one hour, dehydrated in 95 per cent and absolute alcohol for one hour in each grade, and mounted in euperal.

The parasites found were identified as follows:

- **CESTODES:** All from the small intestine; Taenia cylindracea. Lateriporus teres. Two species of unidentified Cestodes.
- **NEMATODES:** Acuaria anthuris, encysted in the proventriculus; Syngamus gracilis, encysted in trachea; Microtetrameres helix, from proventriculus; Trichostronglyus pergracilis, from small intestine; Trichosrongylus sp. from caeca; Subulura papillosa, from small intestine; Amidostomum sp. from small intestine; one unidentified Nematode from the liver.
- ARTHROPODS: All external; Menopon mesoleucum; Degeeriella rotundata; Liponyssus bursa; Haematopinus suis, one specimen, undoubtedly a stragler, since hogs were present in the pasture where the crows were roosting.

Summing up the above results, it was found that 40 per cent of the crows examined were infested with mites, 70 per cent with Mallophaga; 60 per cent with Nematodes and 30 per cent with Cestodes.