

WILD BIRDS AS POSSIBLE CARRIERS OF POULTRY PARASITES. BY J. E. ALCATA, L. KARTMAN, and H. I. FISHER

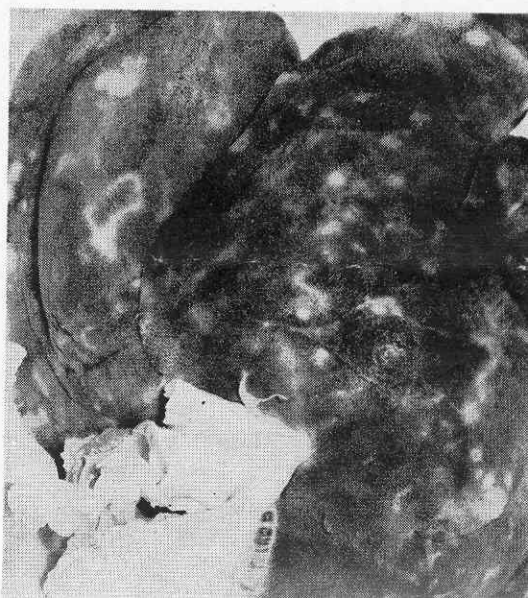
Wild birds, particularly sparrows, mynahs, and doves, are frequently seen on poultry farms and often eat from the feeding troughs of chickens. These observations led to a brief study to determine to what extent these birds served as reservoir hosts of poultry parasites in this locality. During the first quarter of 1947 several wild birds were obtained from two poultry farms near Honolulu and were examined for parasites. Those which were recovered are listed below.

HOST	NUMBER EXAMINED	PARASITES RECOVERED
English sparrow (<i>Passer domesticus</i>)	20	Lice: <i>Myrsidea</i> sp. Mites: <i>Arctohelaps meganethalis</i> Strandtmann; <i>Neonyssus</i> sp.; <i>Proctophylades truncatus</i> Robin; <i>Syringophilus columbae</i> Hirst. Hippoboscids: <i>Ornithoeca vicina</i> (Walker). Roundworms: <i>Tetrameris</i> sp. Tapeworms: undetermined species.
Mynah (<i>Actidotheres tristis</i>)	5	Lice: <i>Menacanthus spinosus</i> (Piaget); <i>Myrsidea incidens</i> (K. & Ch.). Mites: <i>Monstauria</i> sp.; (close to <i>P. truncatus</i> Trouessart); <i>Trouessartia</i> sp. (close to <i>T. trouessarti</i> Oudins.); Roundworms: <i>Cheliospirura</i> sp.; <i>Microtetrameris</i> sp.; <i>Oxyspirura mansoni</i> (Cobbold). Tapeworms: undetermined species. Flukes: undetermined species.
Barred dove (<i>Geopelia striata striata</i>)	5	Lice: <i>Columbicola</i> sp.; <i>Goniodes</i> sp. Mites: <i>Liponyssus bursa</i> (Berlese). Mites: <i>Pterolichus</i> sp.
Chinese dove (<i>Streptopelia chinensis</i>)	1	Mites: <i>Pterolichus</i> sp.
Brazilian cardinal (<i>Paroaria cucullata</i>)	2	Lice: <i>Myrsidea incerta</i> (Kellogg). Roundworms: <i>Tetrameris</i> sp.
Japanese white-eye (<i>Zosterops palpebrosus japonicus</i>)	2	Mites: <i>Dermoglyphus elongatus</i> (Megnin); <i>Megninia</i> sp. (close to <i>M. gallinulae</i> (Buch.)); <i>Pteronyssus</i> sp.? <i>Trouessartia</i> sp. (close to <i>T. trouessarti</i> Oudins.).

In addition to the above findings, blood smears taken from seven sparrows, two Japanese white-eyes, and three mynahs all proved to be negative for protozoan parasites.

Of the parasites listed above, the mite *Liponyssus bursa* and the eye-worm *Oxyspirura mansoni* also parasitize chickens. Wild birds, therefore, may serve as reservoir hosts for those parasites. The gizzard worm, *Cheliospirura* sp., reported from a mynah above, was a single immature specimen and not easily identified as to species. Further studies are desirable to find out if *Cheliospirura hamulosa*, a gizzard-worm parasite of chickens, can be transmitted by mynahs.

Figure 20. Liver of swine, showing lesions and discolorations resulting from migration of immature kidney-worms, *Stephanurus dentatus*. Such livers are condemned at slaughter, resulting in loss to raiser and consumer.



The ectoparasites listed above were identified by the following workers: lice, by E. W. Stafford; mites, by E. W. Baker and H. H. J. Nesbitt; hippoboscids, by J. C. Bequaert. Their assistance is gratefully acknowledged.

ECONOMIC LOSSES OF HOG LIVERS DUE TO KIDNEY-WORM INFESTATION. BY L. KARTMAN and J. E. ALCATA

Previous reports made by the Parasitology Department^{1,2,3} state that of 25,234 hogs slaughtered in Honolulu during 1945 and 1946, 2.8 percent showed adult kidney worms in the kidney fat. This figure represented only a partial incidence of infection since no record was available on the young migrating worms which before reaching the kidneys migrate to various parts of the body and particularly the liver where they produce many lesions resulting in grayish-white scars, abscesses, and discolorations and giving the liver a mottled appearance (fig. 20). In this condition the liver is condemned under meat-inspection regulations and results in a loss of an item of marketable value.

A recent survey at the Honolulu Pork Center indicated that the majority of hog livers discarded by the inspectors showed lesions caused mainly by kidney worms and to a much lesser extent by the migrating larvae of the intestinal roundworm, *Ascaris lumbricoides*.

Factual confirmation on liver losses due to parasitic infection was obtained by personal conversations with inspectors of the Territorial Board of Health, Food and Drug Division. In addition, an analysis was made of the monthly reports of the Division of Pure Food and Drugs, kindly supplied by Mr. George Akau, Food Commissioner and Analyst. These reports indicated that parasitic lesions and abscesses are the chief cause for discarding hog livers and it seemed important that the available figures be analyzed in terms of economic value to the merchants and people of Honolulu.

^{1,2,3}ALCATA, J. E. PARASITES AND PARASITIC DISEASES OF DOMESTIC ANIMALS IN THE HAWAIIAN ISLANDS. Pacific Sci. 1(2):69-84, 1947.