

SOME ECTOPARASITES FROM INDIANA MAMMALS

Recently the author had the opportunity to study some ectoparasitic Acarina and Insecta in the collection of the Joseph Moore Museum, Earlham College. The following is an initial list on the ectoparasitic fauna of Indiana.

All specimens have been catalogued and permanently mounted on microscope slides or preserved in 70 per cent alcohol. The collector and catalogue number in the writer's collection are included with the data pertaining to each specimen. Each entry of data represents a collection from a different individual. Acknowledgment is extended to J. B. Cope, Curator, Joseph Moore Museum, for permission to study the collection and to the following specialists for their help on some of the identifications: G. M. Kohls, U.S. Public Health Service, Hamilton, Montana (Ixodides); W. H. Lawrence and K. L. Hays, School of Natural Resources, University of Michigan, Ann Arbor, Michigan (Siphonaptera and *Laelaps alaskensis* respectively); T. J. Spilman, U.S. Department of Agriculture, Beltsville, Maryland (Lep-tinidae). The remaining mites, anoplurans, and mallophagans were identified by the author. The list of mammal hosts, and their ectoparasites, follows.

TALPIDAE

Scalopus aquaticus (Linnaeus)—Wayne Co., Centerville, 9 March 1954, H. Cope, host to 12 fleas, *Ctenophthalmus pseudagyrtes* Baker, 1 mite, *Haemolaelaps glasgowi* (Ewing), and 2 beetles, *Leptinus testaceus* Müller (E22). Indiana is one of four states from which there is no definite record of *H. glasgowi* (Pratt and Good, Jour. Parasit., 40: 113-129, 1954). Whether *L. testaceus* is a parasite or merely a nest scavenger is not known definitely though Comstock (AN INTRODUCTION TO ENTOMOLOGY, Comstock: 487, 1949) believes it to be the latter. Wayne Co., Centerville, 13 March 1954, H. Cope, host to 1 flea, *Ctenophthalmus pseudagyrtes* Baker (E18).

LEPORIDAE

Sylvilagus floridanus (Allen)—Wayne Co., Centerville, 25 May 1953, J. B. Cope, host to 1 tick, *Haemaphysalis leporis-palustris* (Packard), (E13); Wayne Co., Centerville, 7 Jan. 1956, J. B. Cope, host to 4 fleas, *Cediopsylla simplex* (Baker), (E143).

SCIURIDAE

Marmota monax (Linnaeus)—Wayne Co., Richmond, Aug. 1955, G. L. Ward and Woofers, host to 1 tick, *Ixodes cookei* Packard (E146).

Sciurus niger Linnaeus—Jefferson Co., Deputy, 5 June 1953, N. Wilson, host to 1 flea, *Orchopeas howardii* (Baker) and 1 tick, *Dermacentor variabilis* (Say), (E8); Decatur Co., Horace, 20 Dec. 1955, N. Wilson, host to 46 lice, 5 *Hoplopleura sciuricola* Ferris, 1 *Neohaematopinus sciurinus* (Mjöberg), and 40 *Enderleinellus longiceps* Kellogg and Ferris (E122). *H. sciuricola* is reported from nine species of squirrels, not including *S. niger*, by G. F. Ferris (Mem. Pacific Coast Ent. Soc., 1: 294–295, 1951).

Tamiasciurus hudsonicus (Erxleben)—Wayne Co., Earlham College Campus, 12 March 1953, M. Bloemker, host to 1 flea, *Orchopeas howardii* (Baker), (E24).

CRICETIDAE

Peromyscus leucopus (Rafinesque)—Posey Co., Hovey Lake, 31 Dec. 1954, N. Wilson, host to 1 flea, *Epitedia wenmanni* (Rothschild), (E20); Posey Co., Hovey Lake, 31 Dec. 1954, N. Wilson, host to 8 lice, *Hoplopleura hesperomydis* (Osborn), (E20).

Synaptomys cooperi Baird—Harrison Co., Harrison State Forest, 30 Dec. 1955, N. Wilson, host to 1 mite, *Laelaps alaskensis* Grant (E133).

Microtus ochrogaster (Wagner)—Jackson Co., Freetown, 9 Jan. 1953, R. E. Mumford, host to 1 flea, *Epitedia wenmanni* (Rothschild), (E26); Harrison Co., 6 Jan. 1955, R. E. Mumford, host to 1 flea, *Stenoponia americana* (Baker) and 2 mites, 1 *Laelaps kochi* Oudemans and 1 *Haemogamasus barberi* Ewing (E10).

Pitymys pinetorum (Le Conte)—Harrison Co., 6 Jan. 1955, R. E. Mumford, host to 1 flea, *Stenoponia americana* (Baker) and 6 mites, *Haemogamasus barberi* Ewing (E17).

PROCYONIDAE

Procyon lotor (Linnaeus)—Wayne Co., T. 13 N., R. 2 W., Sec. 6, 20 Feb. 1953, J. Tileston, host to 1 tick, *Ixodes cookei* Packard (E15); Wayne Co., Richmond, 23 April 1954, G. L. Ward, host to 1 tick, *Ixodes texanus* Banks (E12). This tick is damaged and G. M. Kohls (personal communication, 21 June 1955) informs me it is probably *texanus*. Franklin Co., Fairfield, 13 Jan. 1956, J. B. Cope, host to 12 fleas, *Chaetopsylla lotoris* (Stewart), (E140).

MUSTELIDAE

Mephitis mephitis (Schreber)—Wayne Co., T. 13 N., R. 2 W., Sec. 6, 14 Feb. 1953, G. L. Ward, host to 7 ticks, *Ixodes cookei* Packard (E11); Wayne Co., Centerville, 2 June 1954, M. Bloemker, host to 2 lice, *Trichodectes mephitidis* (Packard), (E33).

SUMMARY

Study of a collection of ectoparasitic Acarina and Insecta from Indiana resulted in the reporting of one species of beetle, six of fleas, five of ticks, and four of mites from eleven species of mammals.—NIXON WILSON, 522 North Third Street, Bardstown, Ky. Received May 7, 1956.