### Abstract

Ectoparasites on wild raptors and mammals pose a threat to the health of the animal, and possibly to the surrounding community. This study examines ectoparasites of wildlife in Central Oklahoma. The survey was conducted by removing ectoparasites off of ecto-parasitised patients at OSU’s Veterinary Medical Hospital and preserving the parasites in 70% ethyl alcohol. The total number of cases included 22 hosts with a total of 51 animals: 32 raptors and 19 mammals. The ectoparasite collections resulted in 220 individual ectoparasites, with a diversity of 14 louse species, 4 hematophagous fly species, 4 tick species, and 4 flea species. 14 km, 4 hematophagous fly, and 3 tick species were identified from the raptors, and 4 tick and 4 flea species were identified from the mammals. Ten species of lice and one hematophagous fly species have never been reported in Oklahoma. Of the ectoparasites surveyed, 4 tick, 3 hematophagous fly, and 3 flea species are potential vectors of zoonotic disease pathogens.

### Methods

- Between 2016-2018, ectoparasites were obtained from patients admitted into the Exotics Ward of Boren Veterinary Medical Hospital.
- Samples were collected by hand and/or forceps and placed into plastic 1.3ml capped tubettes with 70% ethyl alcohol, labeled with species, case number, and date, and stored at room temperature.
- Identified to Order using a Wild Heerbrugg stereomicroscope.
- Ticks were identified to species by keys (Dobie et al. 2017).
- Lice were identified using keys (Beequaert 1953 and 1955).
- Flies were identified using a pictorial key (Gerhardt et al. 1945).

### Results

- A table of the hosts and ectoparasites identified.
- The number at the end of the host name indicates the number of hosts while the number at the end of the species name indicates the quantity of ectoparasites of that species that was found on the host.

### Conclusion

The ten species of hematophagous flies reported in Oklahoma are: *Haemaphysalis leporispalustris*, *Laemobothrion atrum*, *Kurodaia magna*, *Myrsidea fuscomarginata*, *Myrsidea simulans*, *Ctenocephalides felis*, *Philopterus sivalii*, *Dermacentor variabilis*, *Amblyomma americanum*, and *Rhipicephalus evertsi evertsi*. The lice species collected that are potential vectors of zoonotic disease pathogens are: 4 tick species, *Amblyomma americanum*, *Dermacentor variabilis*, *Haemaphysalis leporispalustris*, and *Philopterus sivalii*. The ectoparasites collected that are potential vectors of zoonotic disease pathogens are: 4 tick species, *Amblyomma americanum*, *Dermacentor variabilis*, *Haemaphysalis leporispalustris*, and *Philopterus sivalii*. The ectoparasites collected that are potential vectors of zoonotic disease pathogens are: 4 tick species, *Amblyomma americanum*, *Dermacentor variabilis*, *Haemaphysalis leporispalustris*, and *Philopterus sivalii*.