

Introduction:

- Anaplasmosis is a disease caused by the blood-borne parasite *Anaplasma*. There are 9 species; six are considered zoonotic.
- *Anaplasma* bacteria may be transmitted by bite of *Ixodes scapularis* during feeding on WTD and man.
- A 2020 research project assessed prevalence of White-tailed Deer (WTD) exhibiting Anaplasmosis and could potentially serve to infect hunters handling WTD carcasses.

Method:

- Dept. of Natural Resources (DNR) sanctioned quota-hunts were identified in 10 counties.
- 84 Blood samples were collected/EDTA preserved from deer.
- 84 Peripheral blood smears assessed for presence of *Anaplasma* sp. on surface of Erythrocytes.



Results

- Peripheral blood smears made from WTD killed during 2020-21 deer season at Ga. DNR sanctioned quota-hunts. Of the 84 samples examined, 25 displayed presence of *Anaplasma* parasites on surface of Erythrocytes. Chart 1 shows number of deer by county infected with *Anaplasma* sp.

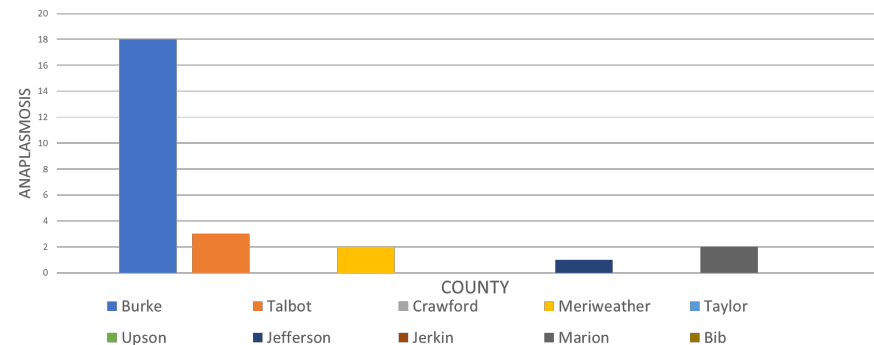
Discussion

- Ticks carrying *Anaplasma* bacteria in mouthparts may infect WTD and hunters blood meal.
- Presence of Anaplasmosis in WTD signifies tick infestation of animal.
- Hunters may be susceptible to Anaplasmosis infection during carcass handling.
- Transmission of Anaplasmosis to hunters may occur due to contact with ticks found on deer carcasses.

Conclusion

- Hunters are often a forgotten population in need of public health education.
- Hunters should recognize the tick species *Ixodes scapularis*.
- Hunters should understand precautions to avoid tick bites/transmission of Anaplasmosis.
- Hunters must recognize symptoms of Anaplasmosis in order to seek prompt medical attention to include: fever, headache, joint/muscle aches, chills, nausea/vomiting, loss of appetite.

CHART 1 - Anaplasmosis by County



Anaplasma bacteria on surface of Erythrocytes

