

THERESA A. PROCHASKA, Dept. of Natural Sciences and Mathematics, West Liberty University, West Liberty, WV, 26074, and ZACHARY J. LOUGHMAN, Dept. of Natural Sciences and Mathematics, West Liberty University, West Liberty, WV, 26074. Assessment of ticks and tick-borne pathogens in the northern panhandle of West Virginia.

Ticks are major vectors of zoonotic pathogens that impact humans. Tick species that parasitize humans in the eastern United States include *Dermacentor variabilis*, *Ixodes scapularis*, *Rhipicephalus sanguineus*, and *Amblyomma americanum*. Tularemia, Lyme disease, Anaplasmosis, and Rocky Mountain spotted fever are among the debilitating diseases humans can acquire from these tick species. Current data on ticks and the transmittable pathogens they carry are limited in the northern panhandle of West Virginia. With the changing climate in concurrence with migrating birds and accidental introductions, the tick fauna, their active seasons, and the pathogens they harbor could be radically changing. To ascertain the current tick fauna in the northern panhandle of West Virginia, an active surveillance study will be conducted in Marshall, Ohio, Brooke, and Hancock counties. Ticks will be collected via drag sampling, roadkill sampling, and domestic-nest sampling in the northern panhandle of West Virginia. Data will determine which species are present, in addition to their preferred habitat and active seasons. Bacterial DNA from collected ticks will be amplified to identify zoonotic bacterial pathogens via Next Generation Sequencing.