White, A.V., Berl, E., Williams, C., Doyle, M., Smith, D.M., Byrd, B.D., Reiskind, M.H., & Richards, S.L. (2022). Horse owner practices and equine and human arboviral encephalitis in North Carolina. *Journal of Environmental Health*, 84(7), 20–26.

Corresponding Author: Stephanie L. Richards, Professor, Environmental Health Sciences, Department of Health Education and Promotion, Environmental Health Program, College of Health and Human Performance, East Carolina University, 3403 Carol Belk Building, 300 Curry Court, Greenville, NC 27858. Email: richardss@ecu.edu.

Note. This supplemental file was submitted by the authors along with the respective peerreviewed article and has been posted online due to space limitations at https://www.neha.org/jeh/supplemental. The *Journal of Environmental Health* did not copy edit this file. The authors have provided this supplemental file as an extra resource should the reader want more information.

Supplemental Appendix: Survey

- 1) How many horses reside at the farm where you work?
 - a. 0-4
 - b. 5-10
 - c. 11-15
 - d. >15
 - e. Other_____
- 2) Are your horses bothered by mosquitoes at the farm?
 - a. Yes
 - b. No
 - c. Unsure
 - d. More information_____
- 3) Have you ever been bitten by a mosquito at the farm?
 - a. Yes
 - b. No
 - c. Unsure
 - d. More information_____
- 4) If answered "Yes" to Question 3, in what activity were you participating when the mosquito bite(s) occurred?
 - a. Horseback riding_____
 - b. Barn maintenance_____
 - c. Other _____
- 5) Has one or more of your <u>horses</u> ever had a mosquito borne illness (e.g., West Nile virus, Eastern equine encephalitis)?
 - a. Yes
 - b. No
 - c. If yes, which illness_____
 - d. Additional information_____

- 6) If you answered "yes" to #5, what was the outcome of the horse illness?
 - a. Recovered completely
 - b. Recovered, but with long term health issues
 - c. Died
 - d. Additional information_____
- 7) Do you or your veterinarian (indicate which) vaccinate your horses against West Nile virus each year?
 - a. Yes
 - b. No
 - c. If yes, in which month does vaccination take place?_____
 - d. Additional information_____
- 8) Do you or your veterinarian (indicate which) vaccinate your horses against Eastern equine encephalitis virus each year?
 - a. Yes
 - b. No
 - c. If yes, in which month does vaccination take place?_____
 - d. Additional information_____
- 9) If you or your veterinarian do not vaccinate your horse(s) against West Nile virus and/or Eastern equine encephalitis each year, what is the reason for not vaccinating?
 - a. Too expensive
 - b. Don't think the vaccine works
 - c. Other (please describe)_____

10) How do you protect your <u>horses</u> from mosquito bites? Circle all that apply.

- a. Apply insect repellant. Specify product used, if known_____
- b. Permethrin-treated blanket
- c. Barrier spray insecticide treatment of property. Specify produy inseT5.4(____d)0u7so.3(pecify produ)(h-1.6393 -1.153 TD.0013 Tc

13) How important is you being protected from mosquitoes to you?

- a. Very Important
- b. Important
- c. Unimportant
- 14) How important is your horse(s) being protected from mosquitoes to you?
 - a. Very Important
 - b. Important
 - c. Unimportant
- 15) Within the last year, which of the following actions have you or someone at your farm taken to protect against mosquitoes? Please choose all that apply.
 - a. Removal of empty containers, such as tires, flower pots, and bird baths.
 - b. Use of drainage system for storm water, such as ditches.
 - c. Personal application of insecticides targeting mosquitoes.
 - d. Personal protection by wearing appropriate clothing.
 - e. Personal protection by wearing repellant (for example Off!® or Cutter®)
 - f. Hiring professional mosquito control services to conduct pesticide treatments.
 - i. Please specify the company or agency name: ____
 - ii. Type of service:_
 - Specify product used, if known___
 - g. Cleaning gutters of leaves, pine needles, and other debris.
 - h. Other (please specify): ___
 - i. None

16) Indicate your level of agreement or disagreement for the following statements:

- a. Mosquitoes are nuisance when I am working at the farm.
- Strongly Agree Agree Neutral Disagree Strongly Disagreeb. I am concerned about my health related to mosquito-borne illnesses when I am working at the farm.
 - Strongly Agree Agree Neutral Disagree Strongly Disagree
- c. I am concerned about the health of my horse(s) related to mosquito-borne illnesses when I am working at the farm.

Strongly Agree Agree Neutral Disagree Strongly Disagree