

Study of Human Behavior and Attitudes Linked to Human-Deer Transmission of SARS-CoV-2

NASS OMB Docket Review

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BACKGROUND

Animal and Plant Health Inspection Service (APHIS) has established a cooperative agreement with the University of Minnesota to administer quantitative surveys (via Interactions with Deer Questionnaires) in 5 states, including Minnesota, Pennsylvania, New York, Illinois, and Tennessee. The survey will collect data concerning the values, beliefs, attitudes, and behaviors associated with humans' interactions with white-tailed deer (WTD). The key knowledge gaps addressed with this quantitative data include the types and frequencies of human-WTD interactions that occur across multiple settings, and the role that cognitive factors, such as perceptions, beliefs, and attitudes, play in influencing behaviors and intentions relevant to human-deer interactions. In addition, this study will evaluate the extent to which human-to-WTD SCV2 transmission events may be reduced by providing information to communities about SCV2 in WTD populations and transmission risks.

Identifying and quantifying differences in cognitions and behaviors relevant to human-deer interactions in various settings will improve risk assessments for wildlife managers to identify optimal control points.

STATEMENT A - SAMPLING FRAME and SAMPLE

The potential respondent universe are community members whose primary residence is within the states of Minnesota, Pennsylvania, New York, Illinois, and Tennessee. Households will be sampled using a multi-stage cluster sampling approach. The study sites will be chosen to represent a gradient of population density, land type, and spatial location across white-tailed deer range in each state. Doing so will allow us to cover households in the state that live near WTD populations, as well as open-space or natural areas. Site boundaries will also be informed by natural features, county lines, human features, and other factors deemed relevant.

Within each site boundary, all census tracts included in the boundary will be identified. The number of single-family residences located in each census block and the proportion of the total number of single-family homes located in each census block will be calculated. A proportional

number of households per each census block that is numerically representative of the proportion of residencies located in the entire study site will be randomly sampled. A total of 12,000 housing units will be randomly sampled across each of the 5 study sites.

The survey will be administered to 60,000 potential respondents. A 25% response rate is expected with a total of 15,000 responses. The goal is to obtain 3,000 completed responses from community members from each state included in the study (Minnesota, Pennsylvania, New York, Illinois, and Tennessee).

REMARKS and SUGGESTIONS

The sampling universe and sampling methodology are fine. However, it is interesting that the targeted 60,000 samples are using the same sample size of 12,000 for all 5 states, given that the area, population density, land type, and spatial location across WTD ranges are different in each state.

The methods to maximize response rates and to deal with non-response as well as issues related to data quality (as described in Statement B) seem justified.