Tough Turkeys: What Effect Does Climate Change Have on the Home Range of Wild Turkeys in Northeast Minnesota?

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Wild Turkeys have been predominantly found in southern Minnesota until recent observations in NE Minnesota. Turkeys rely on having less than one foot of snow on average all winter long (Rusch 2020). The question was: What effect has climate change had on the Wild Turkey's home range in Minnesota? The hypothesis was: If climate change has impacted average winter snow depth in Northeastern Minnesota over time, then Wild Turkeys' home range would shift northward. A survey was created in Survey123 and the link was sent out via teacher email to staff, to a Tribal DNR officer's email contacts, and on social media. Also, Wild Turkey data was downloaded from eBird. Maps were made in ArcGIS online using this study's data and eBird data. The hypothesis was supported. Average snow depth for days over 12" of snow decreased from 1995-2020. Maps showed more turkey observations over the last 15 years in NE Minnesota. Observations show they are eating seeds found in cow manure in farmers' fields surrounded by aspen stands, which provide them with food and a place to roost. It was surprising to see how much turkeys have already adapted their behavior to fit into a new region.

Awards Won:

University of Arizona: Renewal Tuition Scholarship