

Tough Turkeys, Year 2: What Habitat Type Do Turkeys Now Associate With in Northeast Minnesota?

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Wild Turkeys have predominantly been 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). Last year's research answered the question "What effect has climate change had on the Wild Turkey's home range in Minnesota?" 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. Average snow depth for days over 12" of snow decreased from 1995-2020, and maps showed more turkey observations over the last 15 years in NE Minnesota. This year, the question was: What habitat types do turkeys now associate with? The hypothesis was: If turkeys are shifting north, they will associate with aspen habitat types. The hypothesis was supported. As shown by ArcGIS Pro analysis using polygons and the Spatial Join tool, turkeys now associate most closely with aspen and farmland habitat types. Observations show they eat seeds found in cow manure in farmers' fields surrounded by aspen stands, which provide them with food and a place to roost; turkeys show surprising adaptations to new conditions.

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