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SUPER Public Communication Piece- Infographic

Script

White-tailed deer (*Odocoileus virginianus*) are arguably one of the most popular species in America. Since they are the most popular species that can mean that their population has grown to quite the numbers. This overabundance in deer population has led to negative effects including decreases in vegetation abundance through overgrazing, increases in disease spread, and increases in vehicle collisions. Habitat fragmentation is also a leading factor in the effects of wildlife populations which in turn can affect community structure and species distribution. For this project I wanted to see how different types of management strategies along with landcover can affect deer population and movement in the Eastern USA. To set these parameters, a modeling software called NetLogo was used to test social and ecological data. When conducting how to find these results it was clear that two factors contributed to deer population and movement, those factors being percent land available to management and how the management (hunters) affected the deer population. In the preliminary results we found that both management plans played a role in how they affect deer population. When discussing how landcover and use affect the movement of deer it is noted that when a selected town has more open space and forested areas, the deer tend to be drawn to those areas for apparent reasons like shelter, food, and gathering (mating). Limitations within this research include that these kinds of models can have an inherent bias because they are simplifications of reality and are only meant to capture an aspect of a real system. This means that when changing how management plans can affect population and movement of White-Tailed deer, it is only taking into account of how it will affect that specific species. The use of models can help municipalities all across the globe predict and prove how management can be implemented for the greater good of human-deer interactions.