

Vegetation Analysis and Population Study of the White Tailed Deer at PPL Montour Preserve Montour County, PA

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Background

The Montour Preserve is located in Montour County, PA, in Washingtonville, PA. The Preserve is owned by PP&L. Part of PP&L's program for the Preserve is the responsible management of its land and the practices used on the land. Research on land management issues and conservation are important to the Preserve. Deer management is a major issue in this region. The data collected in this study is a 13 year collaboration between The Montour Preserve and Lycoming College.

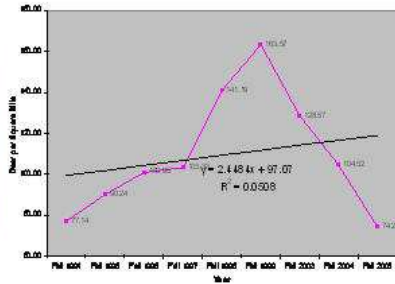


Deer Population

The deer population was tracked through the use of a spotlight survey. Deer were classified by age and sex (if possible) on 323 acres of Preserve land and 215 acres of PPL managed land (hunting land). Data shows that the deer populations peaked, when there was a peak in the doe population the previous fall. The graphs suggest that the deer population is decreasing at the Montour Preserve. Since it peaked in the fall of 1999. The spring count also shows that the population is decreasing. The population could be decreasing for a number of reasons, but deer could have been observed more due to the weather or time of year. Buck's are not that distinguishable in the spring and in the spring many fawns are the same size as does. More deer were counted when the weather tended to be warmer and there was less wind.



Deer Total per Square Mile



The picture on the left shows site 2 inside the enclosure. The picture on the top shows site 3 outside the enclosure, which is on no hunting land.

Browse Survey

When deer are overpopulating an area, they tend to destroy the vegetation and stop the process of regrowth. In 1992, Natural Resource Inc. reported that the deer browse was minimal and was not causing that much damage in all locations. Only certain areas were being over browsed. More recent browse studies show that a large number of species are being browsed. Data from 1998 and 1999 show that beech and hawthorn trees at sites 1 and 3 are browsed 100% of the time. During this time, the deer population was at its highest recorded levels. Data also suggests that the diversity of plant species has also decreased over the past 13 years.

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