

Report Highlights

The Deer Management Program of the Pennsylvania Game Commission

House Resolution 2008-642 directs the LB&FC to evaluate the PGC's deer management program. Given the technical nature of this study, we contracted with the Wildlife Management Institute to conduct this study. WMI found:

- **The public has been given an opportunity to provide input to the PGC's deer management decision making process.** The PGC has encouraged public debate on the consequences of abundant deer on forest health, deer health, and human interactions.
- **PGC's deer management goals are consistent with its constitutional mandate.** The PGC is constitutionally mandated to conserve and maintain all wildlife for the benefit of all people. The PGC has done a good job in balancing the interests of all stakeholders, not just hunters.
- **The PGC has developed a credible population model to track population trends, both state-wide and at the WMU level.** The PGC uses an SAK (sex-age-kill) model to estimate the size of the PA deer herd. WMI reviewed the factors used in the model and believe it to be credible. Using this model, the PGC estimates the 2007 deer herd to be about 1.03 million, with an upper estimate of 1.28 million and a lower estimate of 0.85 million. This represents a 25% decline from the 2002 estimate of 1.38 million.
- **The PGC needs to develop and prioritize policies and procedures to increase harvest reporting.** The declining trend in reporting rate jeopardizes the viability of the PGC's harvest estimates. The PGC's point-of-license system offers opportunities to improve harvest reporting.
- **The PGC should seek an alternative to embryos per adult doe as an index of herd health.** Natural variability in embryo data make this a poor measure of herd health. WMI suggested several measures that could be used if new data collection methodologies were employed.
- **Pennsylvania forests are challenged by many environmental and social factors, but abundance of deer is a major cause of forest regeneration failure.** Deer management is an essential part of forest ecosystem management. Progress cannot be made towards the goals of sustainable forestry and better wildlife management unless deer numbers are in balance with their food supply.
- **Forest regeneration is a sound measure of forest habitat health, but insufficient sampling jeopardizes the value of the measure.** Forest health data as currently collected suffers from inadequate sampling. The report makes several recommendations to improve sampling.
- **Citizen Advisory Committees allow stakeholder participation, but is not a fully objective method to assess citizen desires.** CACs provide opportunities for public input into the PGC's deer management plans, but the non-hunting public is not fully represented, and the PGC does not commit to the results of the CAC process when establishing WMU goals.
- **Wildlife Management Units are appropriately sized.** Large WMUs (such as in PA) allow for better sampling of deer management data, but make it difficult to manage for hunter preferences. The DMAP and other programs help mitigate this disadvantage.

Recommendations: The PGC should:

- Continue to improve the accuracy of the SAK model. WMI makes several technical suggestions.
- Use the point-of-sale licensing system, in conjunction with increased enforcement of mandatory reporting requirements, as a way to improve harvest estimates.
- Publish its estimates of the deer herd population for each WMU and explain how those numbers are derived.
- Consider eliminating herd health as a goal due to the lack of a good measure of goal attainment.
- Improve the sampling size for its forest regeneration metric. WMI makes several technical suggestions for improvements.
- Create a statewide CAC and use statistically valid survey methods to obtain public input at the WMU level.
- Increase communication with stakeholders.