

Visual Report on the Impacts of White Tailed Deer on Monmouth County Park Lands



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Healthy forests are natural infrastructure that provide goods and services such as air purification, climate control, water filtration, ground water recharge, flood control, wildlife habitat and recreation.



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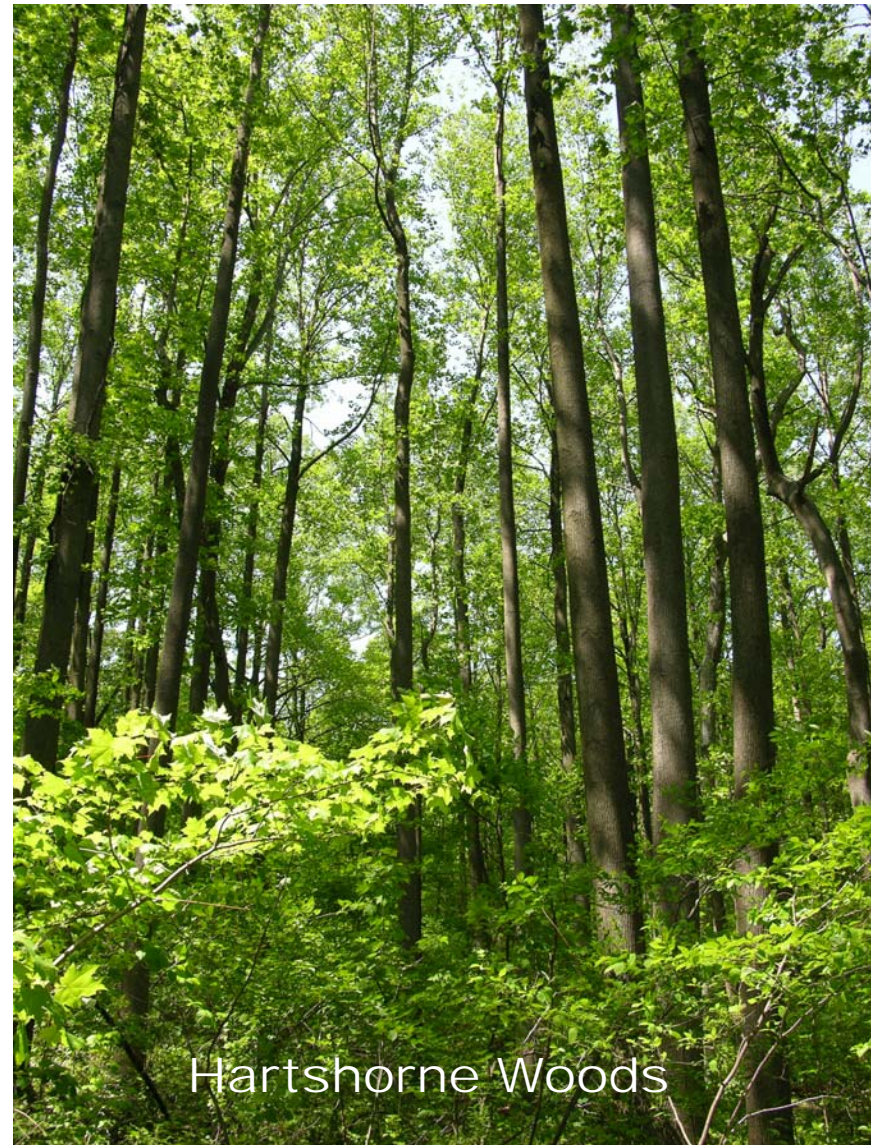
It has been determined that the value of the goods and services provided by healthy forests is \$1476 per acre per year¹.

1 - Costanza et al. 2006. The value of New Jersey's ecosystem services and natural capital.



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A healthy forest has a full compliment of plants, from an understory of shrubs and herbaceous plants, giving rise to small trees which rejuvenate and maintain the canopy of the forest. Putting controls in place before deer populations reach the threshold for impacts is necessary to preserve healthy forest structure.



As white tailed deer populations increase there is more competition for food. As deer eat what is easily within reach resulting in a distinctive line called a 'browse line'.

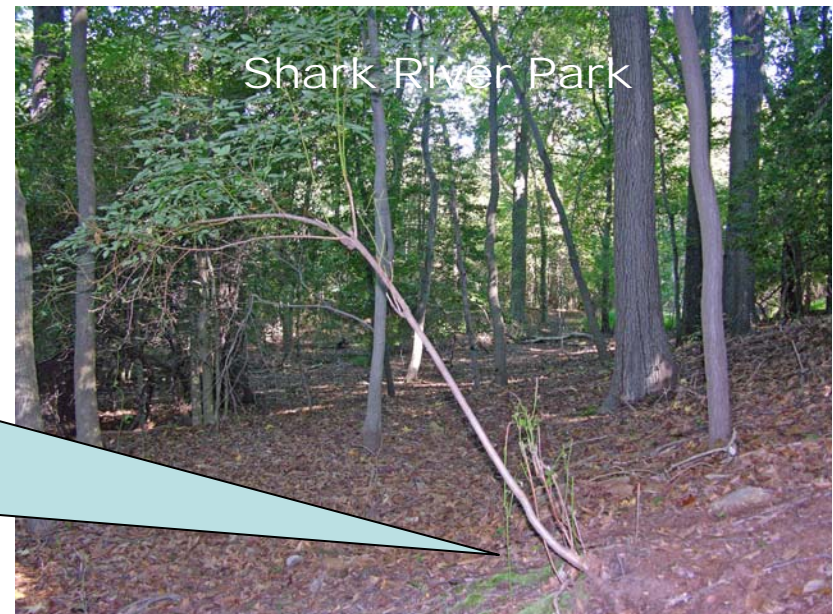


4 ft.





With repeated browsing the natural regeneration of shrubs is compromised. Only older shoots that are above the deer survive.



As the older branches die off, new shoots will not be available and the whole shrub will eventually perish.



Exclosure studies reveal the impacts to the herbaceous components of the forest. A 30-ft by 30-ft square fenced area prevents deer from browsing inside the exclosure.



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Plots are evaluated both within and outside of these permanent exclosures. The percent cover and species diversity is dramatically different as is evident by the photo record.



Thompson Park Inside June 8, 2007



Thompson Park Outside June 8, 2007





Clayton Park

A healthy forest is characterized by the abundant vegetation from the ground up.

A forest that has been browsed heavily is evident by the lack of vegetation, first within the browse line then progressing upward as there is no replacement vegetation.



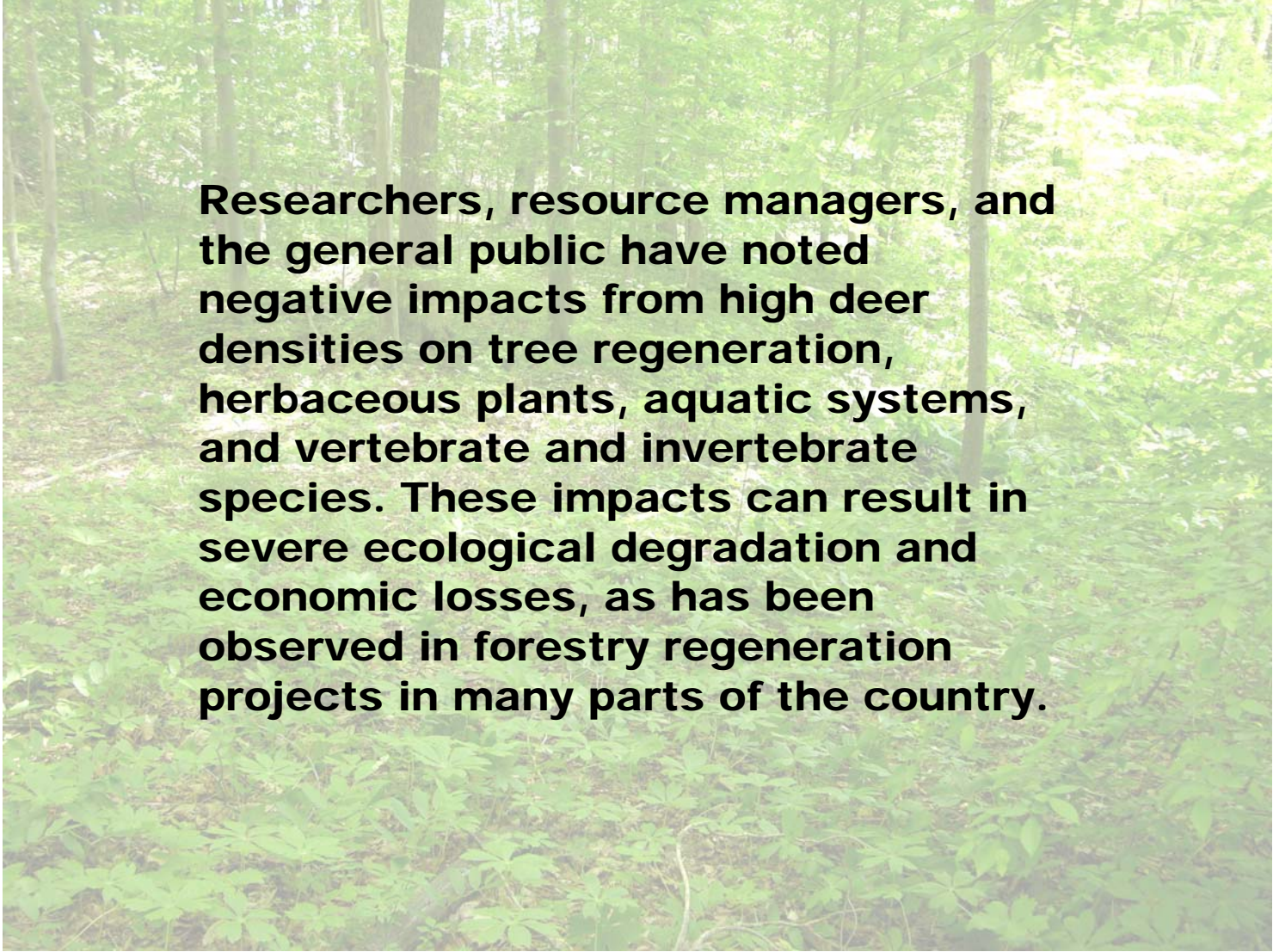
Shark River Park at Gully Road



These studies also show that the regeneration of forest structure is possible if deer populations can be reduced to and maintained at tolerable levels. When a walk in the woods is amongst a carpet of herbaceous and woody plants the health of the forest has returned.

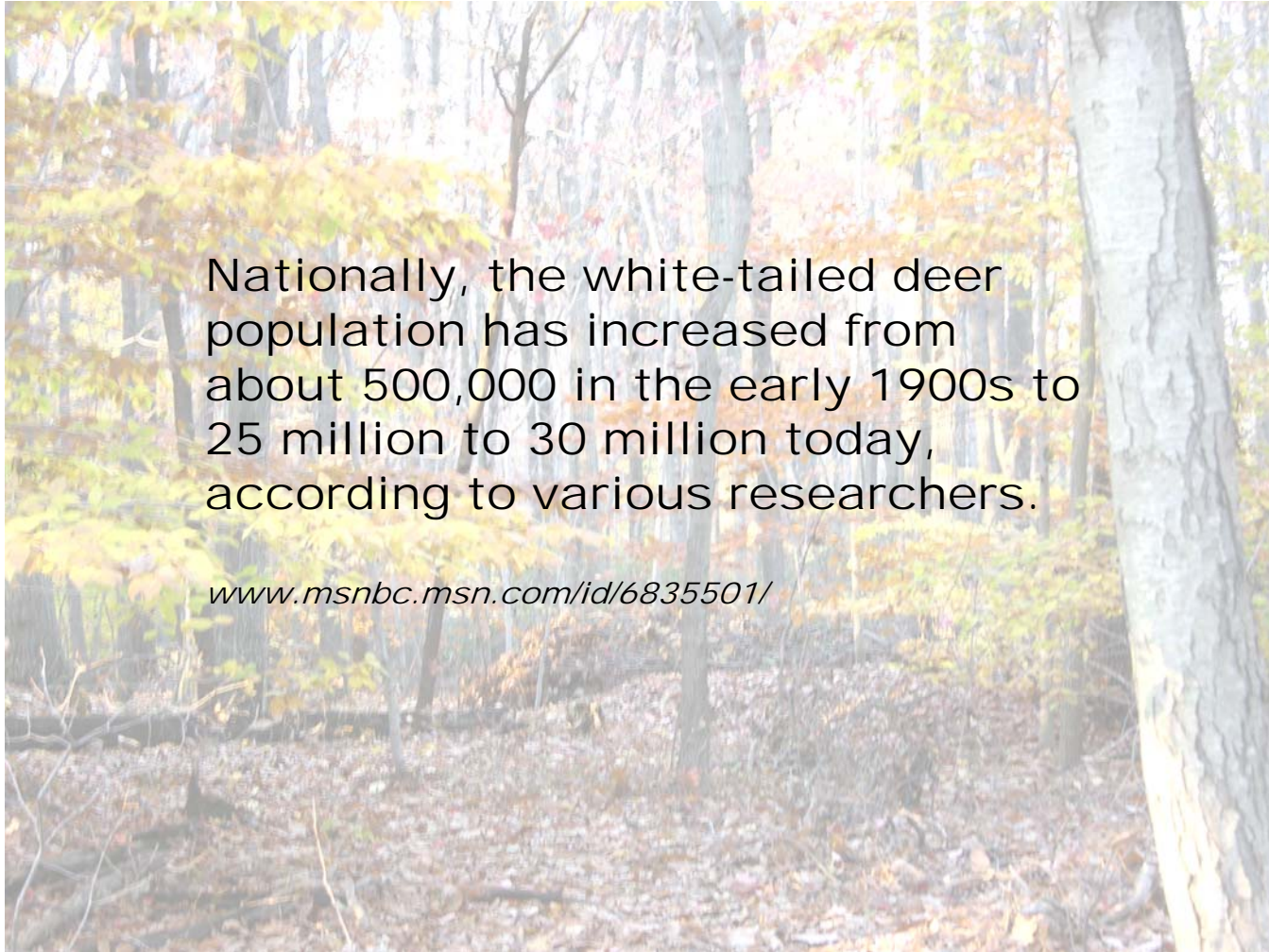


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Researchers, resource managers, and the general public have noted negative impacts from high deer densities on tree regeneration, herbaceous plants, aquatic systems, and vertebrate and invertebrate species. These impacts can result in severe ecological degradation and economic losses, as has been observed in forestry regeneration projects in many parts of the country.



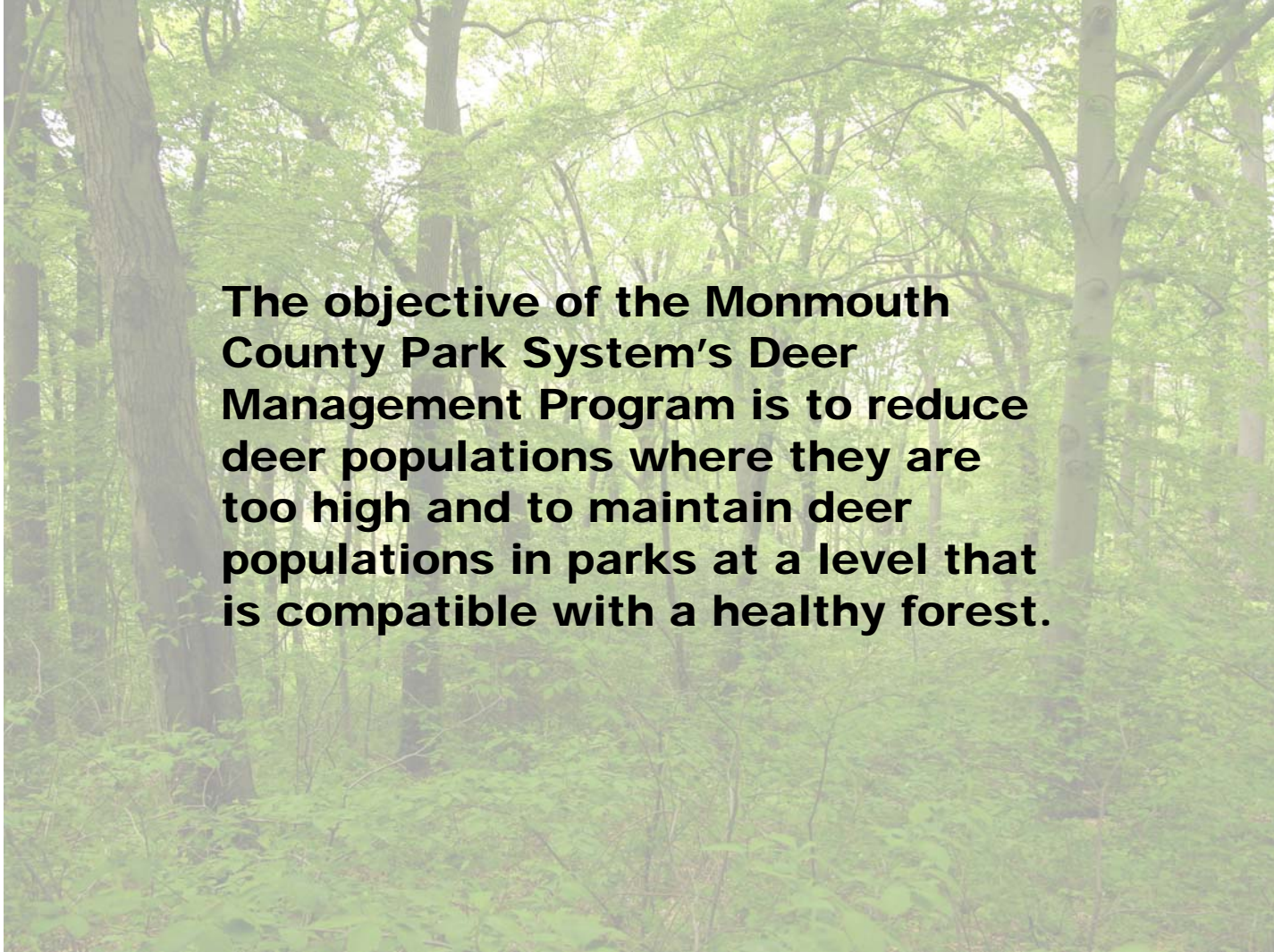


Nationally, the white-tailed deer population has increased from about 500,000 in the early 1900s to 25 million to 30 million today, according to various researchers.

www.msnbc.msn.com/id/6835501/



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The objective of the Monmouth County Park System's Deer Management Program is to reduce deer populations where they are too high and to maintain deer populations in parks at a level that is compatible with a healthy forest.



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