

State Parks and Forests

Background

New Jersey's Green Acres Program has protected more than 1.2 million acres of open space and farmland across the state.¹ Of that, more than 448,497 acres (as of 2016) are included in the State parks and forests system, representing approximately 8% of New Jersey's total land area (national average is about 1%). As of 2016, the system was comprised of 40 state parks, 11 state forests, 20 historic sites, and 25 miscellaneous areas including burial grounds, state marinas, and recreational areas. The state also has 43 areas designated as "natural areas", some of which overlap with the current state parks and forests. These natural areas include lands and waters of the state as authorized by N.J.S.A. 13:1B 15.10 and are included in the natural areas system established by N.J.S.A. 13:1B 15.12A et seq. New Jersey is ranked 2nd in the northeast region and 8th in the nation for state park system acreage.²

State parks and forests are popular for enjoying a wide range of recreational activities, such as camping, swimming, hiking, boating, fishing and hunting, as well as other outdoor pursuits. Through licensing programs and nominal visitation fees, these recreational uses generate economic benefits that contribute to New Jersey's multibillion-dollar tourism revenues.



Photograph by Terri Tucker, DSREH

In addition to direct economic benefits, parks and forests benefit the State through ecosystem services—vital natural functions that could be costly to replicate artificially. These State lands play a vital role in mitigating greenhouse gas emissions and maintaining essential ecosystem services such as soil erosion control, groundwater protection, and biodiversity enhancement. One notable ecosystem service is the ability of forests to serve as "sponges and filters" during rain events, mitigating the flood potential of sustained precipitation. Many parks and forests are located within the watersheds of some of the State's biggest water supply reservoirs and the watershed protection they provide is of critical importance for the water entering the reservoirs. These areas also serve as habitat for wildlife and promote the conservation of New Jersey's biological diversity. State park and forest lands contribute almost half of the area for watchable wildlife in the state.

Status and Trends

Over the period from 1992 to 2016 (i.e., fiscal years lasting from July 1 of the prior year to June 30 of the named year), there was a statistically significant increase in the acreage of State parks and forests from 304,539 acres to approximately 448,497 acres (Kendall Tau p-value < 0.01) (Figure 1)². Over the same period, visitation in the State Park system changed from 10,607,300 to 16,207,066 people, with a peak of

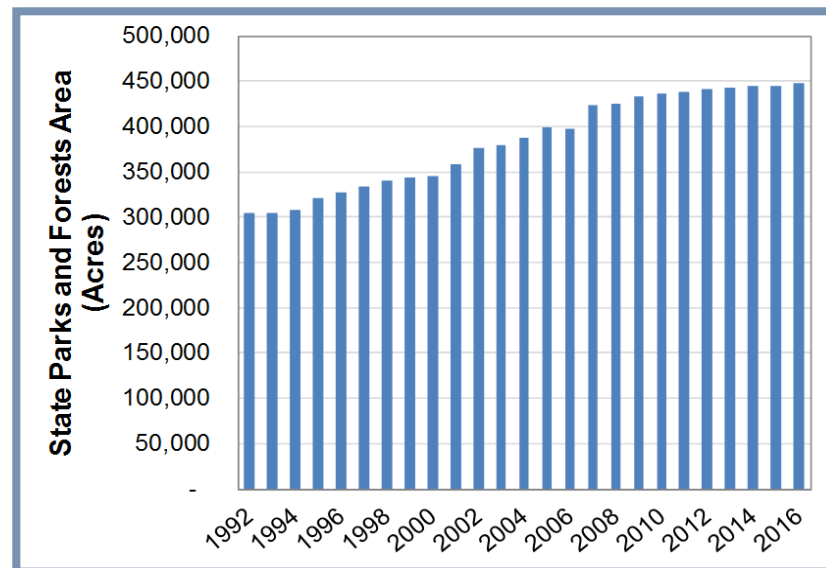


Figure 1. Acreage of state parks and forests for fiscal year (July-June).

18,543,109 in 2008² (Figure 2). However, due to inter-annual variability, there was no discernable statistical trend in the number of visitations (Kendall Tau p-value > 0.05). The number of visitations over time is notable because the Census Bureau estimates that, for 2010 to 2016, New Jersey's residential population was between 8.8 and 9 million people³ whereas the number of visitations each year was nearly double. This could imply that visitors from outside of the State utilize New Jersey's parks and/or that the New Jersey residents who utilize the State's parks visit them multiple times throughout a given year.

These two variables (acreage and visitations) can be used to calculate the use density (visitations per unit area), of which there were 36 visitations per acre during 2016. For comparison, the average use density for all states in the United States was 43 visitations per acre in 2016. The annual use density for the 1992–2016 time period ranged from 32 to 44 visitations per acre, and there was a statistically significant decreasing trend in use density over time (Kendall Tau p-value < 0.05).

For 2016, operating expenditures for New Jersey's park system totaled just over \$11.6 million². The system's share of the 2016 State budget was less than 0.1 percent compared to a national average of 0.16 percent. In terms of capital expenditures for that year, New Jersey spent \$12.75 million compared to the \$15.2 million national average.

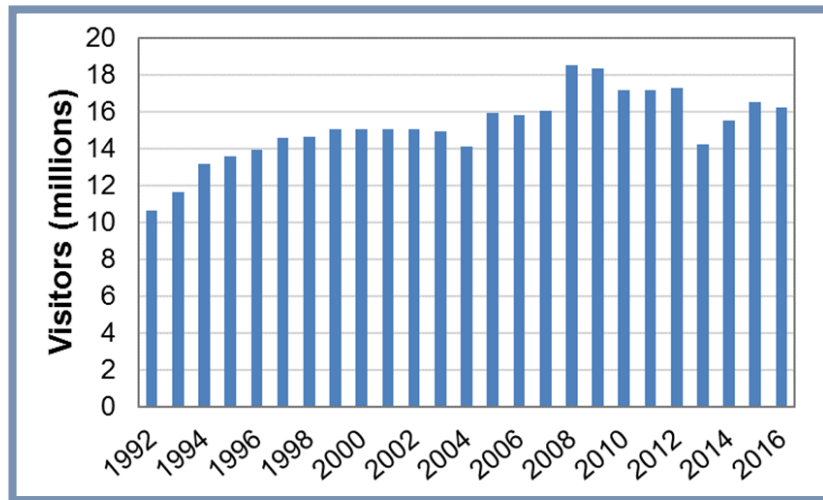


Figure 2. Visitors to state parks and forests each fiscal year (July-June)

Outlook and Implications

In addition to environmental benefits, the State parks and forests, in their current protected state, are responsible for substantial economic benefits to New Jersey. A 2004 DEP study⁴ estimated that the economic value was at least \$1.2 billion annually, which includes the value of important ecosystem services. State parks and forests also create a buffer zone to regulate the spread of development, functioning as a protected area around which sustainable land-use can be implemented. These state lands form the backbone of a physical framework called the Garden State Greenways, which is a collaborative planning tool with which New Jersey communities can systematically and cooperatively coordinate and plan open space initiatives.⁵

More Information

Further information can be obtained from DEP's State Park Service, which administers the State parks and forests: <http://www.state.nj.us/dep/parksandforests>

Much of the information in this report was provided by the NJDEP Division of Parks and Forestry and the National Association of State Park Directors Annual Information Exchange, the latter for which historic data can be found here: <https://research.cnr.ncsu.edu/ren/aix/>

References

- ¹Green Acres Success Stories. <http://www.nj.gov/dep/greenacres/success.html>. Accessed Jan 18, 2013.
- ²National Association of State Park Directors, 2016. Statistical Report of State Park Operations: 2015-2016, Annual Information Exchange for the Period July 1, 2015 through June 30, 2016.
- ³State of New Jersey Department of Labor and Workforce Development, 2016. Population and Household Estimates: Annual Estimates of the Population: April 1, 2010 to July 1, 2016. Accessed 5/19/2017, http://lwd.dol.state.nj.us/labor/lpa/dmograph/est/est_index.html.
- ⁴NJDEP Division of Science, Research and Technology. The Economic Value of New Jersey State Parks and Forests (June 2004).

⁵Information on Garden State Greenways is available at <http://www.gardenstategreenways.org>