



EPA Website

City of Clifton Tree City USA



The National
Arbor Day Foundation

Building a Cleaner – Greener – Cooler New Jersey

Introduction

This flier is funded under the 2006 Cool Cities Community Stewardship Incentive Program (CSIP) Tree Planting Grant in New Jersey. The Grant is administered by the New Jersey Forest service and the Community Forestry Council with funding provided by the New Jersey Board of Public Utilities (BPU) Clean Energy Program. Grants are awarded to communities with State-approved Community Forestry Management Plans (CMFP) to plant trees on non-federal public lands.

The goals of the program are to:

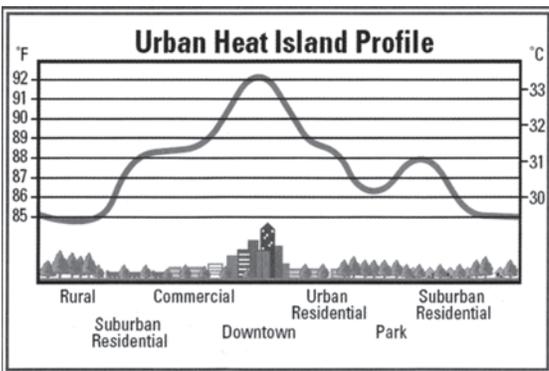
- Promote energy conservation in residential areas through tree plantings
- Reduce energy consumptions for cooling costs by mitigating the heat island effect
- Support municipal community forestry programs that have a State approved CMFP



In May, 2008 the City of Clifton was awarded \$ 25,000 to implement a program that has planted 80 trees at 8 strategic locations throughout the City.

Trees Save Energy/Lower Electric Bills/Reduce CO₂ and GHG

Trees properly planted will save energy consumption and lower costs through shade which can reduce or eliminate the need for air conditioning, and through breaking the force of winter winds. As a renewable source of fuel, trees burn with less air pollution than other fuels when the right equipment is used. Landscaping with trees reduce lawn space and the need to use power mowers. Saving energy will cut residential electrical costs while decreasing the amount of CO₂ and Greenhouse Gas (GHG) emissions generated.



The US EPA published this diagram of a heat island.

The Greenhouse effect is created when heat from the earth is trapped in the atmosphere due to high levels of CO₂ and other GHG. Trees reduce GHG by storing carbon in their roots and trunk and releasing oxygen into the atmosphere.

A tree canopy saves energy by providing shade for all impervious surfaces minimizing the Heat Island Effect which results from solar energy stored in concrete sidewalks, asphalt roads, and steel buildings. Additionally, trees provide a cooling effect through “transpiration” the evaporation of water from the leaves.

Trees also save energy by planting

Evergreens on the north side of a building which will serve as a windbreak in winters. Planting deciduous trees on the south and west side will provide shade and block heat from sun in summer months, and will admit sunlight in the winter when leaves fall.



Squanto Jr. of Clifton

Trees and Livable Communities

Tree planting for sustainability is a vital part of the New Jersey State Development and Redevelopment Plan adopted March 1, 2001 which states: “a vision is needed to promote, locate and design public and private investments that redevelop, maintain and revitalize our existing communities along with the development of new communities in compact forms to:

- Create and maintain beautiful, prosperous and livable cities, towns and communities; and
- Preserve our rural landscape, farmlands, and environmentally sensitive areas.

The Livable Community vision for 2020 will be ecological and healthy to promote exercise and walking as a vital part of daily life for all residents.” Planting trees is of high priority in the plan along with creating greenways for GREENBELTS that are large tracts of undeveloped or developed open space with a considerable amount of vegetation and trees. Therefore, Urban and Suburban reforestation projects are vital to making New Jersey livable and sustainable.



Trees surround Clifton's skating park

Trees in Clifton/Passaic County

Two documents relating to the importance of trees in Clifton and Passaic County are the **Natural Resource Inventory (NRI)** compiled by the Clifton Environmental Commission (EPC) in May 2003; and the **Passaic County Open Space and Recreation Master Plan (PCOSRMP)** April 2001.



*Deer abound in Passaic County
Park border of Clifton/West
Paterson*

In the NRI (pages 49-55) the document outlines the relationship of the vegetation in parks, along rivers, and on the mountain, and lists twenty great trees in Clifton. The NRI states “Garret Mountain is an environmentally significant habitat. It is covered by Oak-Hickory forest and also provides water resources to three watersheds. The moister northeast facing slope of Garret Mountain supports a diverse mesophytic forest dominated by red oak (this is New Jersey’s state tree), white oak, tulip tree, mockernut hickory, white ash, black birch and American basswood.”

This 21 acre forest can be viewed on a parcel of land owned by Clifton adjacent to the County Park on Thomas Street. The property is ideal for environmental science students studying biodiversity, forests, soils, or the geological formation of this area. The PCOSRMP document states in section 5-3 “Large undisturbed tracts of healthy forest support biological diversity provide buffering to water resources, filter air to remove pollutants, modify the local climate, and provide scenic beauty.” Clifton and Passaic County are committed to preserving our open spaces with trees and greenways for environmental “forest” stewardship and sustainability.

Clifton's Community Forestry Management Plan (CFMP) 2006-2011

The CFMP builds upon the first five year (2000-2005) plan which outlines programs and procedures for managing and preserving sustainable urban forest resources in accordance with statewide efforts and Clifton’s Master Plan. The goal of the plan is to increase in the City an appreciation for trees, and the voluntary planting, protection and care of trees on private and public properties. The CFMP can be viewed on Clifton’s website at www.cliftonnj.org click on Trash and Recycling then click Arbor Day Section.

In 2006, the City’s CFMP set a five year goal based on the twelve Community Stewardship Incentive Practices established by the New Jersey Forestry Council. The Council a 20-member advisory group assists in the oversight of local community forestry management plans along with helping and guiding the New Jersey Tree Foundation. The Foundation a non-profit organization promotes forest activities in communities through grants, education, outreach and donation of trees.

Clifton's (CFMP) Reforestation and Sustainability

The goal of the CFMP is to reforest the entire City of Clifton from Botany Village to Delawanna up to Valley Road and Garret Mountain. Reforest with grants, donations, appropriations, the Tree Farm, and through any new construction work done either public or private. The plan calls for a reforestation of the urban, suburban and open spaces of Clifton with a diversity of trees for livability and sustainability.



Majestic and historic Garret Mountain/Clifton, NJ

Urbanization has had a major impact on our trees and forest ecosystems. Clifton is committed to restoring a diverse plant community (trees, shrubs, flower gardens, etc), in the open spaces, parks, schools, wetlands and city streets; thereby, rebuilding the city's ecosystem to create several habitats for wildlife to survive. Sustainability is achieved when the biodiversity of the city's ecosystems are restored and native habitats and wildlife begin to flourish providing residents, visitors and tourists opportunities to enjoy nature locally.

Tree Campus Program-Green & Cool Schools



*Clifton High School Students
National Public Lands Day*

The Green Streets Cool Schools program educates students and residents in the importance of urban forestry stewardship while creating lush green corridors and school grounds. The New Jersey Tree Foundation in partnership with DuPont plant trees along streets and at schools in towns within the Lower Passaic and Author Kill Watersheds. Clifton has received nearly 300 beautiful trees from this program which have been planted at schools. Public Works employees along with teachers and students help in the planting of trees. Students participate throughout the year by watering the newly planted trees when needed.



School #13 students/Earth Day

Trees Enhance / Protect Streams and Rivers

Native trees and forests along rivers and streams (Riparian Buffers) are vital to a healthy watershed ecosystem. They provide canopy and shade, habitat for fish and wildlife, and food and shelter for a myriad of aquatic species.

Forests along waterways and wetlands assist in flood and erosion control, and increase storage for groundwater infiltration and recharge of underground water supplies. Trees are effective in removing



Trees flourish at Third River near Route 3

excess nutrients to waterways and lessen the impact of some pesticides, thereby decreasing the affects of non-point source pollution (NSP). NSP is contamination of our waterways and ocean that results from everyday activities such as fertilizing the lawn, pet waste, motor oil, littering, chemicals such as household cleaners, and pesticides.



Riparian Buffer along Passaic River, Clifton

Tree City USA and Arbor Day

For the past 11 years, Clifton has been named a Tree City USA by the National Arbor Day Foundation and a recipient of the Tree City USA Growth Awards for 9 years. The Tree City USA program is sponsored by the National Arbor Day Foundation in cooperation with the National Association of State Foresters and the USDA Forest Service. The Growth Award recognizes environmental improvement and higher levels of tree care in Tree City USA communities.

More than 150 years ago, a pioneer named J. Sterling Morton and his wife, both nature lovers, moved into the Nebraska territory from Detroit. Settling on this vast treeless plain they quickly began planting trees. On January 4, 1872, Morton first proposed a tree-planting holiday to be called "Arbor Day" at a meeting of the State Board of Agriculture. It was estimated that more than one million trees were planted in Nebraska on the first Arbor Day in history! Arbor Day is still celebrated nationally always on the last Friday in April.



Joe Bennet, forester NJDEP awards Clifton / Tree City USA at annual Clean Communities ceremony



Celebrating Arbor Day / Elm tree planting



Trees beautify Woodrow Wilson Middle School

Reference Material

- 1) Natural Resource Inventory, City of Clifton, Passaic County, New Jersey May 2003; available at Clifton Libraries and from the EPC.
- 2) Passaic County Open Space and Recreation Maser Plan, April 2001
- 3) City of Clifton 2006-2010 Community Forestry Management Plan see website: www.cliftonnj.org

Organizations and Websites:

NJDEP New Jersey Forestry Service:	609-292-2532	www.state.nj.us/dep/forestry/community
New Jersey Tree Foundation:	609-984-3856	www.newjerseytreefoundation.org
The New Jersey Shade Tree Federation:	732-246-3210	www.njstf.org
Forest Resource Education Center:	732-928-2360	www.njforestrycenter.org
National Arbor Day Foundation:	402-474-0820	www.arboday.org
U.S. EPA Forest/Climate Change:		www.epa.gov/climatechange/effects/forests.html
City of Clifton:	973-470-2239	www.cliftonnj.org

For further information on this flier you may contact Alfred Du Bois, Municipal Recycling Coordinator at **973-470-2239** or email at adubois@cliftonnj.org

*Printed on recycled paper



TREE CITY USA®