

Benefits of Trees

Trees Enrich the Health and Quality of Our Environment

Trees enrich the quality of our lives in many ways and these 'Tree Benefits' are not limited to rural areas. In fact, trees planted in urban or suburban environments provide many benefits for a community. The American Forestry Association calculated the value of a 50 year old suburban tree as shown. (*"Cooling Our Communities"*, EPA January 1992).

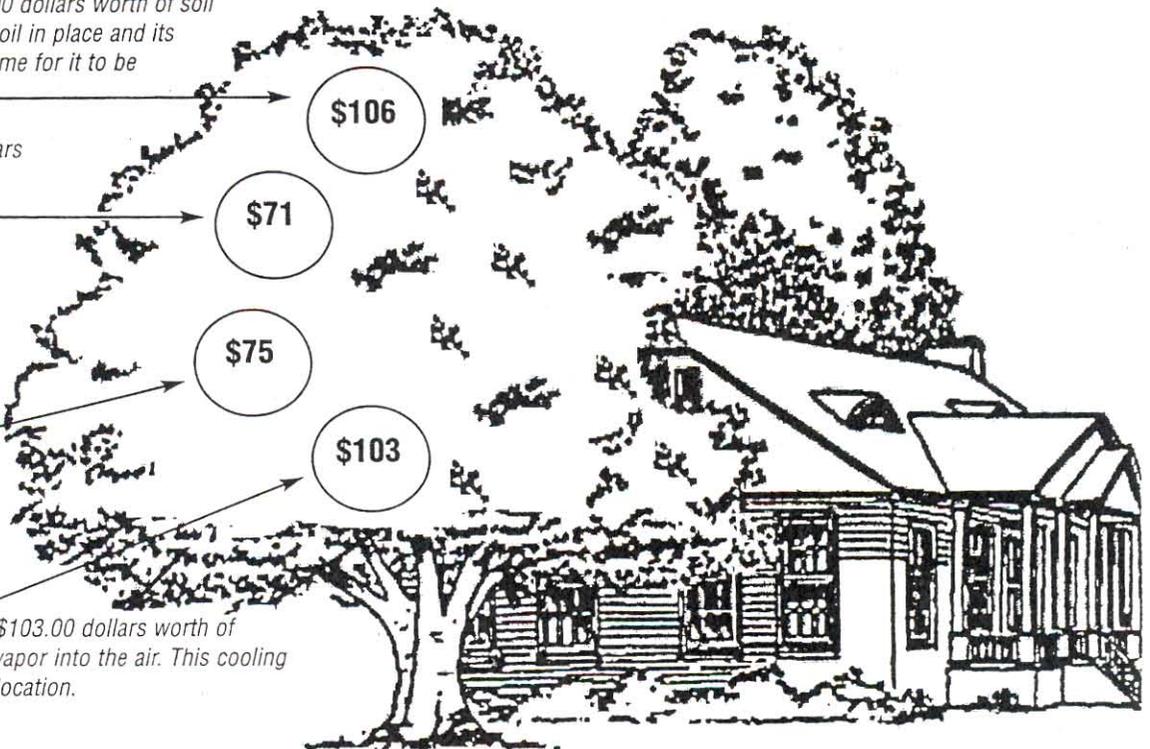
The values presented here reflect 2002 market prices. Computed from a total yearly value of \$355.00, compounded annually at 2.5% interest would bring the total accrued value to approximately \$196,000 over 50 years. The total annual value is actually greater than the sum of the four benefits described below.

1. Soil Protection Controls – \$106.00 dollars worth of soil erosion control. A tree's roots hold soil in place and its leaves slow the rain allowing more time for it to be absorbed into the ground.

2. Clean Air Provides – \$71.00 dollars worth of air pollution control by absorbing carbon dioxide, a gas that contributes to the greenhouse effect, and other harmful pollutants like ozone.

3. Wildlife Habitats Provide – \$75.00 dollars worth of wildlife habitat and food for birds and mammals. For example, oak trees provide food and shelter for 96 species of birds and mammals.

4. Evapotranspiration Generates – \$103.00 dollars worth of air conditioning by releasing water vapor into the air. This cooling effect is more pronounced in a dry location.



What is the Value of Woodlands?

Protection of watersheds.

Clean water is a critical and finite resource. Forests serve as spongy reservoirs, absorbing rain and snow melt, also protecting the soil and checking erosion. By these means, forests stabilize stream flow, help lessen flooding, and enable the recharge of underground aquifers. Woodlands adjacent to reservoirs, lakes, rivers, and streams provide the best permanent protection. A substantial portion of the New Jersey watershed areas are privately owned.

Through careful planning and harvesting under the supervision of a professional forester, the cutting of trees will not diminish watershed values, but actually increase tree health and vigor.

Forested riparian buffers are beneficial to wildlife, creating many feeding and nesting areas. These buffers insure wildlife has the three elements needed to survive: food, shelter, and water. Forest buffers also benefit people, not only adding to the aesthetic values of an area, but most of all, providing clean drinking water for use in homes!



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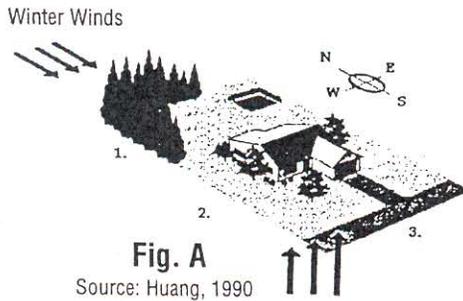
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Money Grows on Trees?

Get the Facts about Trees, Energy Efficiency and Saving Money

\$\$\$\$\$ Trees and Energy Efficiency

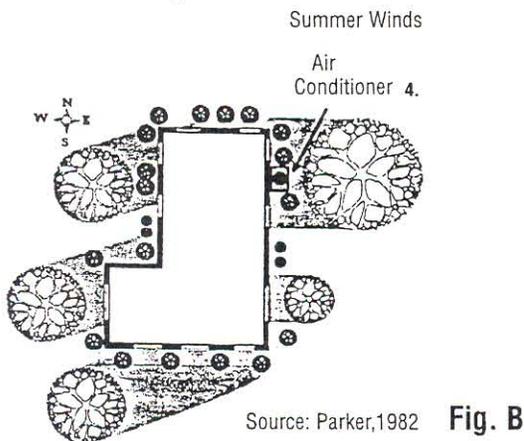


For home owners the strategic planting of trees around your property can help you save energy. In summer, well planted deciduous trees can save 10 to 50 percent on your electric bill. During the winter, evergreen trees planted as a windbreak can save 20 percent on your heating bill.

Sources: Chesapeake Bay Program, American Forests, U.S.D.A Forest Service.

Five things to remember when planting trees:

1. **Winter Winds:** A windbreak is a great way to block cold winter winds. The best trees to use are evergreens. The trees should be placed in rows with spacing of 8' to 12' on center. See Fig. A #1.
2. **Plant Deciduous Trees on the West, East & South** to shade your home most effectively during the summer. This will reduce your energy usage during the hottest part of the day. See Fig. A #2.
3. **Southern Sun:** To make the most of the sun's warmth in winter, plant only deciduous trees on the south facing side of your home. Select trees such as the Kentucky Coffeetree, that have dense summer foliage and an open branching structure during winter. See Fig. A #3.



4. **Keep it Shaded:** Keeping your air conditioner shaded will allow it to work more efficiently. Plant small trees and shrubs to shade the unit, but not so close that they block the air circulation around it. See Fig. B #4.

Source: Urban Forests June/July 1994

5. **Room to Grow:** Planting the right tree in the right site will ensure the tree has enough room to grow. If you require professional assistance contact a N.J. Certified Tree Expert near you. A free directory of tree experts is available from the Board of Certified Tree Experts, 732-833-0325. Source: "Cooling our Communities", EPA January 1992

Trees Enhance Your Environment...

- Trees reduce noise pollution by absorbing sounds. A belt of trees 98 feet wide and 49 feet tall can reduce highway noise by 6 to 10 decibels. The rustling of leaves and birdsongs can make unwanted noise less noticeable.
- Trees also filter and cleanse our water and are so important in the protection of our water supply that fresh water is considered a forest product.
- Trees help conserve energy by blocking winter winds and shading the summer sun.
- Forests provide recreation opportunities such as: camping, hiking, nature study, photography, and many other fun experiences.
- The many colors of autumn or the vibrant green of spring adds color and texture to the landscape.
- According to the U.S. Forest Service, on average trees add between 5 and 6 percent to the value of a house. Nationwide, the value is an extra \$5,000 per house.
- A large shade tree in a year can produce enough oxygen for ten people.
- Trees make cities cooler by reducing the "urban heat island" effect. Urban areas are often warmer than rural areas due to the high concentration of concrete, dark colors, tall buildings, and a lack of tree cover. Plant trees! Bring life to your community!

...and Your Quality of Life!

Healthy Forests



Healthy Watersheds