TREES - WHO NEEDS THEM?

We all need trees because of the many benefits of trees. Most agree that trees have an aesthetic appeal and that they also provide shade, wood for construction and wood for fire places. However, in our busy lives we tend to take the many other advantages of trees for granted.

There is plenty of evidence supported by scientific research that all of us benefit from trees. Some of these benefits are the following:

1 - Trees are Important to Human Health:

- Trees are vital to the health of the community. They provide oxygen, clean air, clean water, and psychological well-being. Leaves filter the air we breathe by removing dust, ash, and other solid particles. Leaves also absorb other air pollutants such as ozone, carbon monoxide and sulfur dioxide.
- It's no secret that spending time in nature offers immense health benefits. Even something as simple as taking a leisurely hike through the woods can turn around a bad mood. There's a name for this phenomenon: Shinrin-yoku, which means "forest bathing" in Japanese and there's science to back it up! When a task is easy and pleasant in America, it is described as "a walk in the woods."
- Trees produce allelochemic substances known as phytoncide. When humans
 are exposed to phytoncides, these chemicals are scientifically proven to
 lower blood pressure, relieve stress, and boost the growth of diseasefighting white blood cells. Toxins and impurities are filtered by tree roots
 and the amount transported to the streams is reduced.
- Trees help lessen mental fatigue which can cause outbursts of anger and lead to violent activity.

2 - Trees Yield Higher Home Sale Prices:

Each large front yard tree adds about 1% to the sales price. Large specimen trees add 10% or more to property value. Homes with working fireplaces sell at a premium. Local trees can conveniently provide wood for fireplaces.

3 - Trees Save the Environment:

Trees intercept rainfall, reduce the need for storm water control, and produce clean water. Analysis of a 16-inch diameter red oak in Washington DC provided the following results:

- > Carbon storage: 430 Kg
- > Carbon sequestration (carbon used for plant functions) 15Kg/year
- Carbon monoxide removed: 40Kg/year;
- > Nitrogen oxide removed 120g/year
- > Ozone removed: 360g/year
- > Particulate matter removed 200g/year
- Sulfur dioxide removed 120g/year

A study of 48,000 trees in Freehold, NJ showed that 545 tons/year were sequestered and 22 tons/year of pollution were removed.

In the Midwest 100 trees retained 539,000 gallons of water/year and in the wet Piedmont region retained 1.2 million gallons water/year.

4 - Trees are a Savings to Homeowner.

Well positioned trees can save 24% on annual air conditioning costs. Trees reduce outside temperatures by 5 degrees F.

5 - Trees Mean Better Business.

In tree-lined commercial districts there is more frequent shopping and longer shopping trips. Shoppers spend more for parking and 12% more for goods.

WHY IS TREE CANOPY SO IMPORTANT IN A COMMUNITY?

Tree canopy is important because it provides important ecosystem services including air pollution removal, storm water runoff reduction, prevention of soil erosion, and building energy conservation. The canopy provides habitat for wildlife and has a positive impact on human mental health and well-being, community cohesion, and economic stimuli. It offers a sound barrier and mitigates wind speed. The tree canopy reduces glare and reflection.

THE BOTTOM LINE ...

- Healthy trees improve the quality of life. Trees require quality care and quality care depends on us. It has been determined that trees pay us back. A study conducted on 100 trees compared the value of tree benefits and maintenance costs for a period of 40 years. The benefits included energy savings, air quality improvement, reduced runoff and increase real estate value. The maintenance costs of trees included planting, pruning, removal and disposal, sidewalk repair, litter, legal and administrative fees. The study found that the value of the tree benefits exceeded the maintenance costs by 296,000 dollars.
- The Shade Tree Advisory Committee of Lawrence Township recommends preservation of existing trees and planting of new trees. Of course, there are cases when trees have to be cut down. However, the benefits of the trees would have to be taken into consideration, before the decision to cut down a tree is made. Emphasis should go toward planting new trees. It takes a relatively long time for a tree to reach maturity. A Chinese proverb says "The best time to plant a tree is 20 years ago; the next best time is now".

The negative effects of trees should be compared with the positive effects. Some think of trees as causing damage to sidewalks and triggering power failures and other damages during stormy weather. These negative effects can be eliminated or reduced by tree maintenance and by planting the right tree on the right site.

The Shade Tree Advisory Committee looks forward to the assistance and cooperation of the Lawrence Township community in promoting and implementing tree preservation and planting programs.

Lawrence Township has been a "Tree City USA" since 1996.