

## WHY TREES ARE IMPORTANT – EXTENDED NOTES FOR TEACHERS

### *Tree Planting*

The simple act of planting a tree helps the environment in so many ways;-

- Filter pollution from the air
- Helps to recycle water
- Creates shade
- Gives shelter from wind and rain
- Provides homes for animals
- Makes food for humans and wildlife
- Provides an interesting, soothing, learning environment for children and the community
- Alleviates the greenhouse effect because trees act as carbon stores
- Prevents or reduces soil erosion and water pollution
- Helps recharge ground water and sustains stream flow
- Properly placed screens of trees and shrubs significantly decrease noise pollution along busy thoroughfares and intersections
- Screens unsightly views
- Softens harsh outlines of buildings

Furthermore:

- Fuel wood for stoves and fireplaces can be produced by establishing energy plantations of hybrid poplars and other fast-growing species that are managed on a sustained yield basis for a continuous supply of fuel wood.
- Properly managed forests provide lumber, plywood and other wood products on a sustained yield basis.
- Depending on location, species, size, and condition, shade from trees can reduce utility bills for air conditioning in residential and commercial buildings by 15-50%. Trees, through their shade and transpiration, provide natural 'low-tech' cooling that means less need to build additional dams, power plants, and nuclear generators.
- Windbreaks around homes can be shields against wind and snow, and heating costs can be reduced by as much as 30 percent.
- Properly placed and cared-for field windbreaks will significantly increase crop yields compared to fields with no windbreaks, even after taking into account the space occupied by the trees. Windbreaks create a more favourable micro-climate for cropland by reducing wind and heat stress on the crop, while at the same time preventing topsoil loss and reducing soil moisture losses. During the winter, more moisture is available for use later in the year, since windbreaks trap and accumulate snow that, without windbreaks, would have blown over and beyond the cropland and ended up on roads.
- Living snow fences, strategically placed, hold snow away from roads, thus effectively reducing road maintenance costs and keeping roads open.

- Trees add beauty and grace to any community setting. They make life more enjoyable, peaceful, relaxing, and offer a rich inheritance for future generations.
- Trees give people a multitude of recreational opportunities and provide habitat for wildlife.
- Trees along rivers, streams, and lakes reduce water temperatures by their shade, prevent or reduce bank erosion and silt, and provide hiding places for improving fisheries habitat.
- They provide brilliant colours to landscapes in the autumn. After the leaves drop to the ground and are raked, they provide excellent mulch for flowerbeds and gardens as well as exercise for people.
- Research indicates that trees help reduce stress in the workplace and speed recovery of hospital patients.
- Police officers believe that trees and landscaping can instil community pride and help cool tempers that sometimes erupt during 'long, hot summers.'

### *Deforestation and Forest Loss*

The effects of deforestation can be categorised in three ways. They include:

- (1) environmental effects
- (2) local social effects,
- (3) and global effects.

Many of the environmental effects contribute to the severity of the social problems. That is why it is important to understand the environmental effects of deforestation and how they contribute to the social effects of deforestation. In terms of global effects, many animals and plants that live in the rainforests face the possibility of extinction.

**Considering the question 'What are trees important?' will encourage and allow students to investigate in different ways, but I would also suggest that the students be encouraged to sit and express their personal views and produce various types of course work across the different subjects listed in the lesson plans.**