

#### **ENVIROSCAPING**

Creating a more sustainable environment John Cooper, Denton County Extension Horticulturist

**ENVIROSCAPING:** The art and practice of creating and maintaining environmentally-friendly landscapes which protect and conserve our natural resources including soil, water, air, energy, vegetation, and wildlife to benefit of all.

The created landscape directly impacts every major environmental issue today. Environmental issues associated with the created landscape intensify as our land is transformed from rural to urban uses. As we create our landscapes for our personal enjoyment, we are also recreating the natural environment according to our own designs. That is why we must all understand and work with our natural land resources to create a healthy and sustainable environment that benefits everyone.

### **Landscape Functions:**

Creating outdoor living environments Providing sensory appeal Adding value to the home and work place Buffering negative environmental forces Filtering and cleansing the air we breathe Filtering and cleansing the water we drink Providing wildlife habitat

### **Environmental Aspects of the Created Landscape:**

Soil conservation Water conservation Water quality Noise/glare/heat abatement Energy conservation Solid waste management Air quality Wildlife habitat

### **Soil Conservation:**

Soil is the foundation of plant health and all terrestrial life including people.

Healthy soils help filter and cleanse our water as it flows into natural waterways and into nearby ponds and reservoirs.

Soil erosion results in sediment flows threaten water quality and reduce the useful life of reservoirs.

Maintaining a seamless vegetative soil cover is the best protection against soil erosion and water pollution.

### Water Conservation:

During periods of peak water demand, roughly half of the domestic water supply is used to irrigate landscapes.

Available water supplies must be designed, constructed, and maintained to meet peak demand created by landscape irrigation.

Xeriscaping cuts demand for landscape irrigation by up to 80% over conventional landscapes.

## Water Quality:

Garden chemicals pollute storm water flowing into natural waterways.

Landscape vegetation is the best soil treatment to capture and filter storm water.

# Noise/Glare/Heat Abatement:

Landscape vegetation can reduce urban noise by 20-40% and screen up to 90% of urban glare.

Lawns reduce surface temperatures by 15-20 degrees compared to concrete and asphalt.

# **Energy Conservation:**

Properly selected and sited evergreen windbreaks reduce heating costs by 15-30%

Properly selected and sited shade trees reduce cooling costs by 10-20%

#### **Solid Waste Management:**

Yard waste comprises one-third of the domestic solid waste stream.

Pruned wood comprises 40-45% of total yard waste and predominate in the spring.

Fallen leaves comprise 30-35% of total yard waste and predominate in the fall.

Grass clippings comprise 20-25% of total yard waste and predominate in the summer.

#### Air Quality:

Landscape vegetation filters airborne dust

Landscape vegetation cools the air and reduces the "heat-island" effect of the urban environment helping to reduce ground-level ozone.

Running a gasoline-powered lawn mower or other landscape maintenance equipment for one hour produces the same air pollution as driving an automobile 50 miles.

#### Wildlife Habitat:

Native landscapes are replaced by created landscapes which may or may not supply the needs of native wildlife.

Wildscaping techniques can be employed in landscapes to create and enhance wildlife habitat on any scale.

# **Keys to Enviroscaping:**

Create and maintain a seamless vegetative soil cover to hold soil and filter storm water run-off.

Reduce water consumption with xeriscaping techniques.

Use plants and cultural practices that minimize the need fro garden chemicals.

Use vegetation to abate noise, heat, glare, dust, and air pollution.

Use trees, shrubs, and vines to establish windbreaks and shade to reduce energy demands for heating and cooling.

Reduce turf to minimize mowing and use plants that require little or no pruning to reduce air pollution and land filling.

Use landscaping to create food, cover, water, and nesting resources for wildlife habitat.

ENVIRONSCAPING: Creating a more sustainable environment, one landscape at a time.

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