



ENVIRONMENTAL BENEFITS OF A HEALTHY SUSTAINABLE LAWN.

Lawn areas around homes help provide for a family's outdoor recreational needs. They provide aesthetically pleasing backdrops for other landscape plantings as well as many environmental benefits. One of the most significant of these is the ability to stabilize soil against water and wind erosion. For these and other reasons mentioned below, lawn areas are an important part of preserving and protecting soil, air, and water resources.

Turfgrasses Provide Many Environmental Benefits:

- change carbon dioxide into the oxygen we breathe
- cool the air by changing water into water vapor
- stabilize dust
- entrap air polluting gases
- control erosion

Turfgrass and Water Quality: As an ever increasing proportion of our society resides in urban and suburban areas, there is a corresponding increase in the amount of paved and other impervious surfaces. Consequently, large amounts of poor quality stormwater runoff are quickly channeled to storm sewer systems that dump directly into nearby lakes, streams and rivers. This can significantly contribute to decreased water quality in the receiving water bodies through sedimentation and pollution. Our lawn grasses provide one of the most effective groundcovers available to prevent erosion and increase water infiltration into the soil.

Research over the last ten years has demonstrated that stormwater runoff from a healthy, relatively dense lawn rarely occurs, even on modest slopes. In fact, in all but very intense rainfall occurrences, stormwater runoff from a healthy, relatively dense lawn is at or near zero.

However, some notable exceptions to this include very steep slopes, saturated soil conditions, severely compacted soils and frozen ground. While the total quantity of runoff water is reduced, increased water infiltration also reduces runoff velocity, thereby reducing the amount of sediment carried in runoff.

Not only does increased water infiltration help protect surface water quality, it also helps recharge groundwater supplies. In addition, the dense fibrous network of roots helps to trap and remove nutrients and other pollutants from water moving down through the soil. This filtering effect can actually improve water quality as it moves through the turfgrass root zone.

Information obtained from the University of Minnesota and www.treesaregood.com