

Choices in Land Use and Soil Loss:

a case study of the Rhode Island turf industry  
as an environmentally destructive agricultural practice

Curtis J. Rist

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## Introduction

Soil loss on America's cropland has reached astronomical proportions. Already, up to one-third of all topsoil has been lost through wind and water erosion. One researcher estimates that for each pound of food which reaches the table in this country over thirty pounds of topsoil are swept away (Perelman, 1977). While national harvests of food and fiber crops continue to increase because of new technology, the American land resource base is continually and gradually being degraded. For the moment, this is not a threat to our food supply because technological changes are still effective in negating any of the effects on soil loss. The future demands on our agricultural land, however, require the preservation of prime farmland and the maintenance of that land through conservation.

The correct choice for the use of farmland with respect to the benefit of our society is not always that which individual farmers and landowners choose for their land. It is the purpose of this paper to focus on the clash between landowner's rights to farm and develop their land as they wish and the interest of society in protecting the productive potential of agricultural land. Certain factors will be discussed which are responsible for this divergence between individual choices and societal needs.

The Rhode Island turf (sod) industry will be used as a case study

for this discussion. Sod refers to grass which is planted and harvested for transplant as lawn. The turf industry here demonstrates some features and trends characteristic of the agricultural system as a whole in this country. Seven factors have been identified which act to influence the decision of the farmer to plant turf and are discussed in detail. A discussion of the environmental effects of turf farming as well as policy recommendations based on a framework for ecological problems in keeping with the current trend in our society's thought follows.

The goal of this paper is not to target specifically the turf industry, but to use a study of that industry to investigate some problems common to other types of agriculture. By understanding one case study, we will be in a better position to understand the types of factors involved in other forms as well. We will see that the root of agricultural problems is found in the economic pressures acting on a farmer. While farmers are forced to maximize short-term profitability, the preservation of farmland for society requires the maximization of the long-term productive potential of the soil.

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