

A State Soil For Rhode Island

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Soil is a thin mantle that covers the surface of the earth as the skin on an apple. It is one of our most important natural resources and is an important source of many of our basic needs---food, clothing, shelter, and fuel. Soil serves as a medium for the disposal of our wastes. It supports our homes and buildings and is the foundation for our roads and airports. Soil also provides the base for our recreation facilities and is a determining factor in our aesthetic surroundings.

Rhode Island needs to recognize and take pride in its soil. One way to do this is to declare one of our best soils as the state soil. We have a state flower-violet; a state tree-maple; a state bird-the Rhode Island red; a state stone-cumberlandite; and a state mineral-bowenite. But why no state soil yet? I propose that in 1979 the state legislature adopt a state soil.

Soil science and the recognition of soils as natural bodies is relatively new. It began in 1885 in Russia where a great scientist by the name of V. V. Dokuchaev

first observed soils as scientific objects of inquiry. During the first quarter of this century, C. F. Marbut, a geologist from Missouri, applied the ideas of Dokuchaev to the soils of the United States. Soil survey and characterization studies have been carried on in Rhode Island since the late 1800's and Rhode Island was one of the first states to have a completed survey which was published in 1905.

Because soil science is so much younger than the disciplines of geology and biology, most of us do not visualize soils as scientific beings. However, soil is every bit as real and as important as minerals, trees, flowers, stones, and birds. We are now ready and able to celebrate our soils, thanks to the work of the cooperative soil survey program in Rhode Island, carried on by the Soil Conservation Service and the Rhode Island Agricultural Experiment Station. Soil scientists have been studying, describing, classifying, and mapping the soils of the state for many years. Thanks to these efforts, a modern, detailed soil survey has been completed in Rhode Island and the new publication will be available for distribution in 1979.

The present ecological awareness that has helped us appreciate our environment, makes designation of a state soil a natural step. We rekindle longtime concern for

control of erosion, lest we lose the very soil that supports us and most other forms of life familiar to us. Protection of development sites, no till farming, and other conservation practices are emerging out of a determination of Rhode Island residents to keep our soils from eroding. In addition, our appreciation for open space and the need for the preservation of prime agricultural land has become one of our greatest ecological concerns.

I propose that the Narragansett silt loam be designated as the Rhode Island state soil. The accompanying sketch shows a cross section of this soil to a depth of five feet. Like a slice from the side of a basement excavation, this "soil profile" depicts the topsoil, subsoil, and substratum layers. The Narragansett silt loam soil has high potential for producing food, forage, fiber, and ornamental crops. It has few use restrictions for woodland production, for community and recreational development, and for wildlife habitat. The Narragansett silt loam is considered to be one of the best soils in the state and truly represents Rhode Island's developmental and agricultural base.

It has taken ten thousand years for the Narragansett silt loam to form. This soil has developed from two feet of wind-blown silts (loess) laid down during ancient dust

storms thousands of years ago. The substratum is composed of gravelly sandy loam material which was deposited by glaciers. Mixed hardwood forests grew on this soil during its period of development, during which minerals weathered to release plant nutrients, and the forest accumulated them in the humus enriched surface layer. The Narragansett silt loam was officially recognized and named by federal and state soil scientists in 1934.

At the beginning of our third century as a nation, it is fitting that we recognize our debt to the soils of Rhode Island for support of our life in the past and for our hopes for future well-being. Let us pay tribute to this great natural resource by designating the Narragansett silt loam as the state soil for Rhode Island.