I. INTRODUCTION

Current reclamation technology for lands disturbed during the extraction of coal by surface mining has evolved during a period of more than 50 yr. Many individuals contributed to this technology. Millions of dollars have been spent on research addressing diverse aspects of this multidisciplinary problem. Those involved represented federal and state governments, academic institutions, and the coal mining industry. Many contributors were dedicated to minimizing the environmental impact of surface mining and optimistic about returning the disturbed land to a predetermined use that provides economic benefits for our society. Efforts must continue as there are aspects that are poorly understood and practices that could be improved. Nevertheless, it has been proven during these developmental years that mine soils created by surface mining for coal are a resource that can provide economic benefits to society by using existing reclamation technology followed by conventional management practices.

II. EARLY HISTORY

Coal outcrops were mined for domestic use early in U.S. history. The demand for coal increased as our economy developed and mining occurred wherever coal was found. Surface mining probably was used when the overburden was easily removed and the coal seam was near the surface. The demand for coal encouraged the development of improved mining equipment that permitted the recovery of coal seams at increasingly greater depths. Surface mining became a preferred method of extraction as the cost per ton was less than for deep or underground mined coal.

Prior to 1940 the unsightly spoil banks and the rapid expansion of the area disturbed by surface mining resulted in mounting concerns for the environment by the public, politicians, scientists in academic institutions, and personnel in the mining industry. There were early attempts to reclaim the mining disturbance. For example, it was reported a miner in Indiana used crews to dig seedlings from an