The effect of rock fragments in the surface and subsurface horizons on the productivity of soils has been recognized by researchers (Saini and Grant, 1980; Saini, 1970; Saini and Maclean, 1967). Other researchers have noted the effect of a surface mulch composed of rock fragments on the growth of crops and trees (Fairbourn, 1973; van de Werken, 1978; Adams, 1967). United States Department of Agriculture (USDA), Soil Conservation Service (SCS) soil scientists have shown limited documentation of the effect of rock fragments in the surface and subsurface horizons on the productivity of soils in published soil surveys and in the Soil Interpretations Record file (Soil Survey Staff, 1982a).

Size classes of rock fragments defined in a May 1981 draft revision of Ch. 4 of the Soil Survey Manual (Soil Survey Staff, 1951) are shown in Table 1. Skeletal soils have rock fragments 2 mm in diameter or larger which make up 35\% or more by volume with interstices filled with fine earth (Soil Survey Staff, 1975). Skeletal soils may be medial-skeletal, ashy-skeletal, sandy-skeletal, loamy-skeletal, or clayey-skeletal.

The purpose of this chapter is to determine the effect of rock fragments in surface and subsurface horizons on soil productivity as shown by published soil surveys and in the SCS data files.

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