Similar to the second situation, greater depths to lime and to layers of silica cementation are associated with the xeric soil moisture regime. Parent material, particle-size class, physiography, landform stability, rodent and cicada activities, and rootgrowth characteristics assume important roles in soil genesis when cementation occurs over unconsolidated materials. This situation requires very careful consideration of continuity, thickness, and strength of cementation for proper classification. During the study those pedons representing this situation stimulated the most discussion and their classification proved the most controversial.

References


Problems of Mapping and Classifying Soils with Duripans in Idaho

Shelby H. Brownfield

About 10 soil survey areas in Idaho have soils with duripans. The duripans vary from minimal to maximal in development. They occur in soils having no coarse fragments to those soils that are extremely gravelly and cobbly.

It is a problem to maintain consistency of mapping of these soils, not only between members of the soil survey parties, but also between separate soil survey parties. Party members have various degrees of experience in mapping soils with duripans. Interpretation of guidelines for observation, identification, and description of the pans varies by individuals. The rates of mapping soils with duripans also varies by the experience of the mapper, kinds of pans, kinds of geomorphic surfaces, availability of backhoes, access to the areas, and level of the soil survey.

In review of some of the mapping, it was discovered that some soil scientists did not consistently recognize cemented pans in soils, where other soil scientists did. The soil interpretations made for these soils varied, based on presence, strength, depth, and kinds of duripans. Kinds

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