Using Hydric Soil Indicators in Disturbed Soils

G.W. Hurt and V.W. Carlisle

Demands for a more rational approach to the recognition of wetland resources places additional responsibilities on soil scientists to accurately delineate areas of hydric soils (HS). These delineations are integrated with additional spatial data for evaluating, assessing, designing, planning, managing, and regulating wetlands. For a soil scientist, making HS determinations and delineating HS in areas that have been filled, dredged, land leveled, or otherwise disturbed can be a somewhat perplexing and extremely challenging assignment.

In some instances of disturbance, the vegetation has been destroyed or removed; therefore, soils are the only on-site indicator of predisturbance hydrology and the only feasible means of identifying wetlands. Where upturned soil disturbance is recent, sufficient clods of various soil horizons may remain that will aid experienced soil scientists in verifying the original soil morphology. Predisturbance soil surveys should be consulted where available. Undisturbed areas in the vicinity may be investigated to provide information of predisturbance soil morphology. Small areas of unaltered soil may be found at the base of remaining trees; however, most frequently, the disturbance is more extreme. Fill materials spread on disturbed sites usually compound the difficulties of making HS determinations. This article presents guidelines that have been established to determine the hydric status of disturbed soils after varying amounts of fill materials have been added.

Hydric soil requirements are the same in disturbed areas as for areas that have not been disturbed. Most significantly, the hydric soil definition must be sat-