United States Department of Agriculture
Natural Resources Conservation Service

Conservation Practice Standard Overview

Deep Tillage (324)

Deep tillage means performing tillage operations below the normal tillage depth to modify the physical or chemical properties of a soil. It includes tillage operations commonly referred to as deep plowing, subsoiling, ripping, or row-till, which are carried out on an as-needed basis.

Practice Information

Deep tillage is conducted on land having adverse soil conditions that inhibit plant growth or restrict root penetration, such as compacted layers formed by field operations; restrictive layers such as claypans or fragipans; overwash from flooding; deposits from wind and water erosion; or from contamination in the root zone.

The soil moisture content is a very important factor to consider when performing deep tillage operations. Soil moisture should be less than 30 percent of field capacity at the maximum depth of tillage in order to avoid causing compaction.

Common Associated Practices

Herbaceous Weed Control (315) is commonly applied with practices such as Prescribed Grazing (528), Prescribed Burning (338),

Forest Stand Improvement (666), and Upland Wildlife Habitat Management (645).

For further information, contact your local NRCS field office.