

National Forest Inventory – Surface Substrate Definitions

Surface Substrate	Definition
Organic matter	<p>Surficial accumulations of organic materials include the following:</p> <ul style="list-style-type: none"> ▪ organic layers \geq 1 cm thick overlying mineral soil, cobbles, stones or bedrock; ▪ layers of decaying wood < 10 cm thick; ▪ large animal droppings; and ▪ areas covered by mats of bunchgrasses (mats include L horizons).
Buried wood	<p>The proportion of the ground surface covered by buried wood:</p> <ul style="list-style-type: none"> ▪ class 5 woody debris with > 50% below the surrounding surface; ▪ does not include freshly fallen material that has yet to decompose; ▪ may be covered by mosses, lichens, liverworts, or other plants; ▪ if an organic layer has developed over the wood, buried wood must be > 10 cm thick otherwise it is classed as "organic matter".
Decaying wood	<p>Failed trees, large branches on the ground surface, and partially buried stumps with an exposed edge:</p> <ul style="list-style-type: none"> ▪ does not include freshly fallen material that has not yet begun to decompose (e.g. decay class 1 and 2 logs); ▪ may be covered with mosses, lichens, liverworts, or other plants; ▪ if an organic layer has developed over the wood, decaying wood must have > 50% of its thickness above the surrounding surface, otherwise it is classed as "buried wood".
Bedrock	<p>Bedrock includes exposed consolidated mineral material:</p> <ul style="list-style-type: none"> ▪ may have a partial covering of mosses, lichens, liverworts, or other epilithic plants; ▪ does not qualify as bedrock if covered by unconsolidated mineral or organic material \geq 1 cm in thickness.
Rock or cobbles and stones	<p>Rock (cobbles and stones) include exposed unconsolidated rock fragments > 7.5 cm in diameter:</p> <ul style="list-style-type: none"> ▪ may be covered by mosses, lichens, liverworts; or an organic layer < 1 cm in thickness; ▪ does not include gravels < 7.5 cm in diameter.
Mineral Soil	<p>Unconsolidated mineral material of variable texture not covered by organic materials:</p> <ul style="list-style-type: none"> ▪ may have a partial cover of mosses, lichens, and liverworts; ▪ often associated with cultivation, tree tip-ups, active erosion or deposition, severe fires, trails, or late snow retention areas; ▪ includes small cobbles and gravel < 7.5 cm in diameter; ▪ areas of living grass or forb cover where mineral soil is visible between stems are classed as mineral soil, as are exposed Ah or Ap horizons.
Water	<p>Streams or areas of open water in bogs or fens.</p>