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| Nota di contenuto | Cover -- Contents -- Preface -- Introduction -- 1 Forest soil: what it is and how to describe it -- A look at soil -- The description of a soil -- 2 The architecture of soil: texture, structure, and porosity -- Soil texture -- Determination of soil texture -- Stones -- Soil structure -- Origin of soil structure -- Soil consistence -- Soil porosity -- Measurement of soil porosity -- 3 Colour, temperature, and aeration -- Soil colour -- Measurement of soil colour -- Soil temperature -- Soil temperature regimes -- Snow and frost -- Soil aeration -- Measurement of soil aeration -- Soil aeration regimes -- 4 Soil water: the lifeblood of soil -- Energy relationships of water -- Movement of water in soil -- Movement in layered soils -- Soil water measurement -- Soil moisture regimes -- 5 Soil organic matter -- The type and amount of organic matter -- The form and composition of litter -- Energy transformations and decomposition of litter -- The forest floor -- 6 Soil biology: organisms and processes -- Soil fauna -- The measurement of soil animals -- Kinds of animals -- Soil microflora -- The estimation of microflora populations and their activities -- Bacteria -- Actinomycetes -- Fungi -- Algae -- The rhizosphere -- 7 Soil chemistry -- Weathering of soil materials -- Physical -- Chemical -- Clay minerals -- products of weathering -- Cation exchange capacity -- Measurement of cation exchange capacity -- Anion exchange -- Soil reaction -- pH -- Measurement of soil reaction -- Soil elements -- Carbon -- Nitrogen |

-- Phosphorus -- Potassium -- Calcium and magnesium -- Sulphur -- Iron and aluminium -- Manganese -- Trace elements -- Oxidation-reduction -- 8 Soil fertility -- Essential elements -- Measurement of soil fertility -- Elements in plants -- Elements in the soil -- Plant growth -- Plant-soil relationships -- Diagnostic and predictive techniques.

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Sommario/riassunto

This is a comprehensive study of forest soils for foresters, wildlife and park managers, ecologists, and others interested in forest soils. It provides a valuable text for introductory and more advanced courses.
