

Mendocino County Vineyard Soils

Zeni

Zeni soils are moderately deep soils formed from weathered sandstone and mudstone under Douglas-fir and Redwood. They are moderately permeable soils of fair native fertility found on ridges and upper side slopes of mountains.



Typical Profile:

0-.5 ft.: dark brown Loam

.5-2.5 ft.: strong brown to brown heavy Loam

2.5 ft. +: soft, fractured sandstone

Soil Properties of Interest:

Available water-holding capacity (typically 0 - 2.5 feet)	5.0 inches
Drainage class:	Well Drained
Permeability class:	Moderate
Clay range in profile:	15 to 30% Increasing with depth
Sand range in profile:	45 to 30% Decreasing with depth
Coarse fragments in profile:	Less than 15% gravels in profile
Soil pH range:	6.5 to 5.4 Decreasing with depth



Fitness for Use in Vineyards:

- **Nutrient Cycling:** Vineyard establishment practices should aim to retain the limited, nutrient-rich topsoil layer. Organic amendments and cover crops build fertility, improve tilth, and feed soil biology.
- **Water Relations:** Limited water-holding capacity due to soil depth. Soil cover enhances water penetration into the limited subsoil reservoir, particularly on steep slopes.
- **Management Considerations:** Zeni soils are quite susceptible to soil compaction, rutting, and soil erosion on sloped ground. Steep, convex slopes are typically avoided due to instability and erosion.

Winegrape varieties suited to Zeni soils:

Inland: Cabernet Sauvignon, Zinfandel, Merlot

Coastal: Pinot noir, Pinot gris; Cabernet Sauvignon and Zinfandel on ridge top locations



Geography and Soil Climate:

Acres of Zeni in Mendocino County*: 200,000 acres
* Zeni naturally occurs intermixed with similar soils such as Ornaun

Acres of Zeni soil under vines: over 278 acres

Annual precipitation: 40-70 inches
Frost-free days: 220 to 320 days
Elevation Range: 200' to 2,500'

Slope Range: 9 to 75%

