

OREGON OBSIDIAN SOURCES



A panoramic view of Newberry Caldera from the summit of Paulina Peak. Several different post-Mazama obsidian flows that fall into the Newberry Volcano source group are found within the caldera. The prominent Big Obsidian Flow in the right side of the image above belongs to a separate distinct chemical source group.

NEWBERRY VOLCANO

“...we had for some distance not a stony road but really a flinty one of a very large size.”

A description of the passage through Newberry Caldera from the journal of Peter Skene Ogden (1826-27)

ALTERNATE NAMES: Central Pumice Cone Flow, East Lake Flows, Game Hut Flow, Interlake Flow (Inter Lake, North Flow, T Flow), Little Obsidian Flow, Newberry Caldera.

GEOCHEMICAL SOURCE: Newberry Volcano.

LOCATION - COUNTY: Deschutes.

ACCESS AND OWNERSHIP: Newberry National Volcanic Monument; a parking permit is required in the caldera. Access limited by snow in winter months. Collection of obsidian samples in the monument is by permit only.

ARCHAEOLOGICAL SIGNIFICANCE: The rapid adoption and widespread prehistoric use of Newberry Volcano obsidian in the period following the eruption of the flows is well documented in central and northcentral Oregon. Characterized artifacts from this source are occasionally found at sites in the Western Cascades, southwest Oregon, northwest Oregon, and Washington, and has been reported from as far north as British Columbia, Canada.

GEOCHEMICAL NOTES: The Newberry Volcano geochemical source is a composite chemical source consisting of several geochemically indistinguishable (using XRF analytical methods) Holocene obsidian flows (Central Pumice Cone, East Lake, Game Hut, and Interlake flows) located within Newberry Caldera (Newberry National Volcanic Monument). All of the flows making up this geochemical group erupted after the Mazama ashfall of about 6,850 ¹⁴C years ago, providing a unique window that temporally brackets the prehistoric use of the glass.

ACKNOWLEDGMENTS: Kathy Davis.

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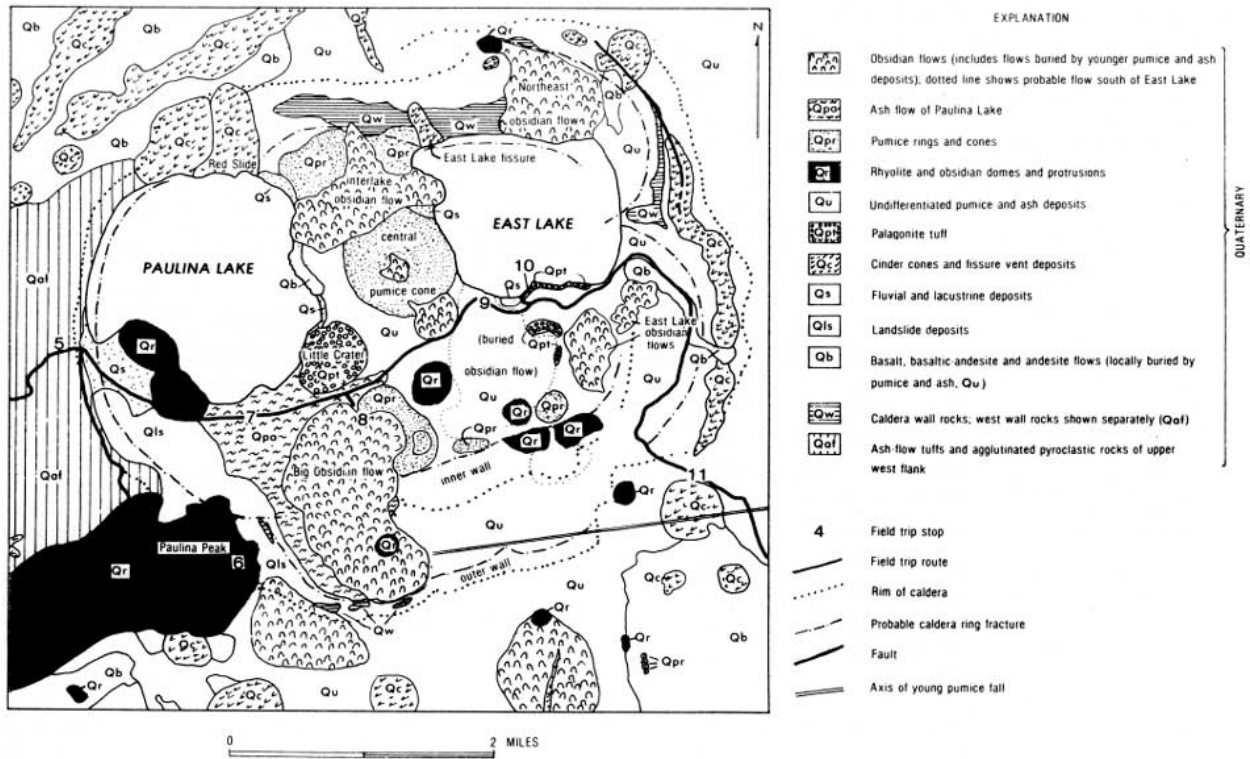
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Simplified geologic map of Newberry Caldera from MacLeod et al. (1981).