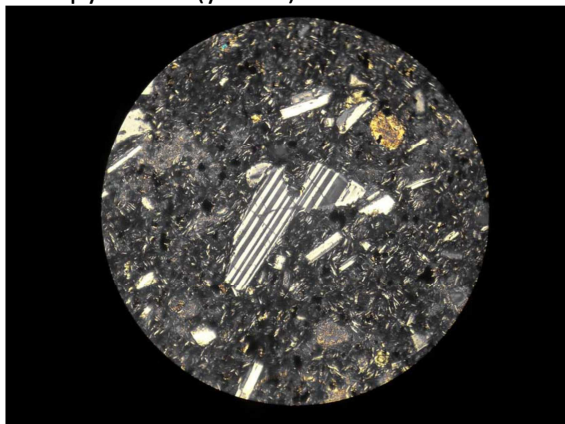


Mesas in California?

By Larry Schemel, retired USGS Scientist

Ch.5 The two distinctive rock types of the Kennedy Table Mountain Complex.

The trachyandesite lava that forms the tops of the Kennedy Table mountains is richer in silica and harder than the Lovejoy Basalt or the Tuolumne Latite. However, it also contains minerals from the mantle and more feldspar, which forms visibly large (2-3mm) crystals. Consequently, it does not polish to the jet black surface like Lovejoy Basalt and is not as good a choice for intarsia and other lapidary purposes. A most interesting feature of the (plagioclase) feldspar in the Trachyandesite is its ability to form laths by polysynthetic twinning. The crossed polarized photomicrograph by Steve Silva shows both plagioclase laths and Clinopyroxene (yellow) from the mantle.



Exposed ends of the tables often show both entablature (upper) and colonnade (post) structures indicating that the lava flow occurred over a relatively short time period. The upper layer insulated the lower layer, allowing it to cool slowly and form posts. The tops of posts are exposed at the Devils Postpile because of glacial erosion. Glaciers did not extend to Kennedy Table Mountain complex, preserving the original structure.



The Kennedy Table mountains are underlain by Finegold Intrusive Suite granites. Finegold Creek, with its exposed granites, borders the west side of Kennedy Table and Finegold Intrusive Suite granites extend north to the western border of Yosemite National Park. These granites are among the oldest (114MY) in the Sierra batholith and granite suites become progressively younger eastward to the Sierra crest.



These granites provided a hard surface for



for grinding acorns. More about this later.