Jefferson County

Jefferson County is entirely on the Snake River Plain, mainly north and west of the Snake River where it takes its horseshoe bend from flowing northwest to flowing south. The bend, likely controlled by the topographic high of the Menan Buttes in adjacent Madison County, allows Jefferson County to have large areas of rich irrigated agriculture in the south and east near Rigby and Market Lake.

The northern and western parts of Jefferson County are Quaternary basalt lava, with the sedimentary basin of Mud Lake in the northwest corner. Around Mud Lake is another area of irrigated farming, with soils formed from lake beds of Lake Terreton, which occupied this area in much of Quaternary time. The northeast corner of the INEEL occupies the western edge of Jefferson County.

See discussion of geology of the Yellowstone-Snake River Plain volcanic system in Rocks, Rails and Trails, Topographic Development of Idaho maps, and Hughes et al. and Embree et al. papers in Geology of Eastern Idaho.

P.K. Link, 10/02

Description of Units for Idaho County Geologic Maps

- **Qa**: Quaternary alluvial deposits
- **Qs**: Quaternary surficial cover, including colluvium, fluvial, alluvial fan, lake, and windblown deposits. Included fluveolian cover on Snake River Plain, (Snake River Group).
- **Qw**: Quaternary windblown deposits; sand dunes and loess.
- **Qf**: Pleistocene silicic volcanic rocks; rhyolite lava and ash-flow tuff (includes Yellowstone Group).
- **Qb**: Pleistocene basalt lava, 2 million to 12,000 years old, flows have some vegetation and surface weathering.
- **QTb**: Pleistocene and Pliocene basalt lava and associated basaltic tuff (deposited close to basaltic vent).
- **Tpf**: Pliocene and Upper Miocene felsic volcanic rocks, rhyolite flows, tuffs, ignimbrites. (in Owyhee County and Mt. Bennett Hills, this should be Tmf).