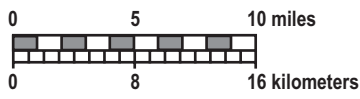
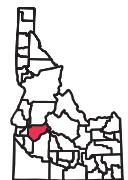
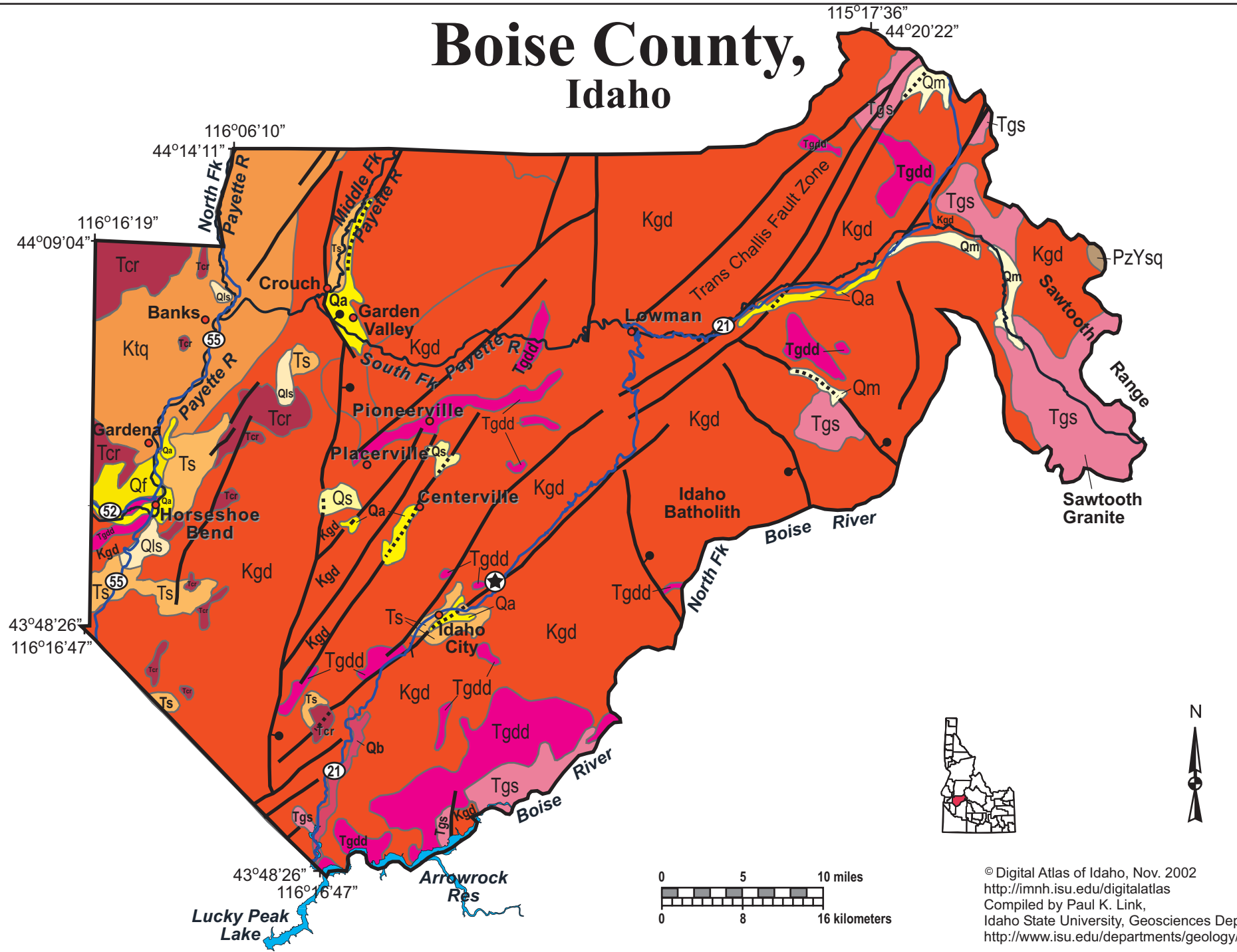


Boise County, Idaho



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<http://www.isu.edu/departments/geology/>

Boise County

Boise County contains a huge area of the central Idaho mountains between Ada County and the city of Boise and the Sawtooth Mountains on the east. This country is drained by the Payette and Boise Rivers, Grimes Creek and Bear Valley Creek. Most of the area is underlain by Cretaceous granodiorite of the Idaho batholith. Eocene intrusions are present in the Sawtooth Mountains on the east and in the Idaho City area. Near Idaho City are extensive placer gold workings from the 19th century. Mineralization was along a northeast trending fault zone associated with the Trans Challis fault zone (Great Falls lineament). A north-tending Basin and Range fault, down on the east bounds the system of northeast-striking trans-Challis faults.

In the western part of the county, west of Horseshoe Bend on the Payette River is tonalitic intrusive rock of the Idaho batholith, and Miocene Columbia River basalt in the valleys. This basalt flowed north east, or up the valleys from sources to the west in Oregon and westernmost Idaho.















Horseshoe Bend is the site of recurrent landslides in Miocene sedimentary rocks of the Payette Formation. These landslides caused rerouting of highway 55 to avoid the active scarps.

P.K. Link, 10/02

Description of Units for Boise County, Idaho

- 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).
- Qf** Pleistocene silicic volcanic rocks; rhyolite lava and ash-flow tuff (includes Yellowstone Group).
- Qls** Quaternary landslide deposits (only Weiser Area).
- Ts** Tertiary sedimentary rocks, undifferentiated. Includes Oligocene and Eocene sedimentary rocks in east-central Idaho (Paleogene basins of Janecke). In northern and western Idaho this unit contains Miocene lake and stream deposits formed adjacent to and above the Columbia River and Weiser basalts, which formed dams in stream canyons.
- Tcr** Miocene basalt (Columbia River Basalt Group); flood basalt, extensively exposed in western Idaho; fed by fissures, many of which are near the Idaho-Oregon border. Flowed eastward up valleys cut into the Idaho mountains.
- Tgs** Eocene granite, pink granite, syenite, rhyolite dikes, and rhyolitic shallow intrusive; last phase of the Challis magmatic event (46 to 44 Ma). Forms craggy scenic mountain landscape in central and northern Idaho.
- Tgdd** Eocene granodiorite and dacite porphyry intrusive, also includes diorite and, in northern Idaho, minor granitic rock; intermediate phase of Challis magmatic event (50 to 46 Ma). Summit Creek stock.
- Kgd** Cretaceous granitic rocks of the 2 mica suite. Idaho batholith and related plutons; granite and granodiorite that contains both muscovite and biotite. Sodium (Na) rich. Intruded between 80 and 65 Ma.
- Ktg** Cretaceous tonalite and quartz diorite; hornblende and biotite bearing early phases of the Idaho batholith. Intruded about 90 to 95 Ma.
- PzYsq** Paleozoic/Mesoproterozoic schist and quartzite; age uncertain.

Symbols

	Geologic unit contacts with unit designation.		Overturned anticline: trace of axial plane.
	Normal fault: certain; dashed where approximately located; dotted where concealed.		Overturned syncline: trace of axial plane.
	Thrust fault: certain; dashed where approximately located; dotted where concealed.		Location of ISU Rockwalk rock from each county.
	Detachment fault: certain; dashed where approximately located; dotted where concealed.		Cities
	Anticline: trace of axial plane: large arrow indicates direction of plunge.		Feature location
	Syncline: trace of axial plane: large arrow indicates direction of plunge.	Roads	
			Interstate Route
			U.S. Route
			State route