

EXPLANATION

Recent

Younger colluvium and alluvium
Qal, silt, sand, and gravel deposits along stream courses
Qls, landslides, consisting of unstratified mixtures of rock fragments and soil where derived from Gannett group; small rock-slides where derived from Brazer limestone
Qf, actively accumulating alluvial fans

Terrace gravel
Qte
Unconsolidated deposits of stream-worn pebbles and cobbles capping low terraces along Crow Creek; pebbles similar in composition and character to those in present stream bottom and are derived from all formations exposed within Crow Creek drainage basin

Older colluvium and alluvium
Qw, unstratified mixtures of unrounded boulders, pebbles, and soil derived from mountain slopes underlain by Brazer and Wells formations; for the most part unit represents weathered hill wash, talus, and alluvial cones that are no longer accumulating, but probably includes some Recent deposits
Qof, large dissected alluvial fans debouching into Crow Creek valley; consists mainly of silt and sand, but contains many pebbles and small boulders showing little or no evidence of stream wear; fans on east side of Crow Creek derived largely from Preuss, Ephraim, and Bechler formations; those on west side derived largely from Wells, Brazer, and Danwoody formations
Qog, rounded pebbles, cobbles, and boulders in isolated patches from 100 to 200 feet above the present drainage level. Relative age of these units is uncertain

Phosphoria formation
Ppr, cherty shale and Rex chert members undifferentiated, thick-bedded cliff-forming chert overlain by poorly exposed thin-bedded cherty mudstone; 280 feet thick. Contact between cherty shale and Rex member, mapped on east limb of Webster syncline
Ppm, Meade Peak phosphatic shale member, dark-brown to black mudstone, limestone, and phosphorite that weather to form scales; 150 to 200 feet thick

Wells formation
Ppw, upper member, poorly exposed thick-bedded light-gray to pale-yellowish-orange fine-grained quartz sandstone containing some interbedded gray dolomite and limestone; contains some red beds in upper 400 feet; includes 100-foot-thick Grandeur tongue of Park City formation at top that was not mapped separately; 1,000 to 1,100 feet thick
Pfw, lower member, medium-bedded gray cherty limestone containing some interbedded sandstone; generally forms low slopes with low limestone ribs; approximately 500 feet thick

Brazer limestone
Mb
Massively bedded cliff-forming limestone 350 feet thick, underlain by interbedded limestone and sandstone about 1,300 feet thick; base not exposed

Quaternary

ANGULAR UNCONFORMITY
Tsl
Salt Lake(?) formation
Light-gray fine-grained pebble conglomerate; pebbles are mostly chert and limestone and are cemented by calcite

ANGULAR UNCONFORMITY
Kg
Gannett group
Light-red and pink sandstone interbedded with chert-quartzite-limestone pebble conglomerate; generally weathers to ribs of conglomerate separated by red soil slopes; probably mostly Ephraim conglomerate but may include some Bechler conglomerate at top; at least 2,000 feet thick

Upper Jurassic

Js
Stump sandstone
Thin-bedded greenish-gray calcareous glauconitic quartz sandstone 400 to 500 feet thick; forms low ridges

Jp
Preuss sandstone
Poorly exposed medium-bedded grayish-red and colored quartz sandstone containing some interbedded siltstone and grit; total stratigraphic thickness not known, but is probably about 1,700 feet

Middle Jurassic

Jtg, Jjt, Jte, Jtd, Jtc, Jtb, Jta
Twin Creek limestone
Jtg, thin-bedded gray-green calcareous, glauconitic sandstone; 70 feet thick
Jjt, poorly exposed light-gray shaly limestone; 1,600 feet thick in adjacent areas
Jte, medium-bedded gray dense cliff-forming limestone; 250 feet thick
Jtd, soft reddish-brown siltstone and hard medium-bedded brownish-gray oolitic limestone; 40 feet thick; north of Warm Creek mapped with Jta as Jtd
Jtc, nonresistant light-gray shaly limestone; 280 feet thick
Jtb, hard medium-bedded brownish-gray glauconitic sandy limestone; not exposed
Jta, soft brownish-red siltstone and brecciated gray limestone; 180 feet thick

Jn
Nugget sandstone
Very thick bedded light-reddish-orange fine-grained quartz sandstone that forms a low boulder-strewn ridge; uppermost few feet is white and friable; lower part not exposed in quadrangle, but formation is 900 to 1,700 feet thick in adjacent areas

Lower Jurassic

Ta, Tty, Ttd, Ttl, Ttp, Ttd
Thaynes and Ankaeh formations
Ta, upper member of Ankaeh formation; not exposed
Tty, Timothy sandstone member of Thaynes formation; not exposed
Ttd, upper part of Portneuf limestone member of Thaynes formation; not exposed
Ttl, Lanes tongue of Ankaeh formation; not exposed
Ttp, lower part of Portneuf limestone member of Thaynes formation, resistant thick-bedded gray fossiliferous limestone interbedded with brownish-gray siltstone and sandstone; 1,000 feet thick. Beds between this part and lower black shale member are not exposed
Ttd, lower black shale member of Thaynes formation, poorly exposed thin-bedded gray to black siltstone and limestone with gray Meekoceras-bearing limestone at base; 700 feet thick

Lower Triassic

Rdu, Rdl
Dinwoody formation
Rdu, upper member, resistant gray fossiliferous limestone interbedded with soft olive-brown calcareous siltstone; contains several thin red siltstone tongues of Woodside formation; 700 feet thick
Rdl, lower member, poorly exposed thin-bedded olive-brown calcareous siltstone and shale; 500 to 900 feet thick

Tertiary

Contact
Long dashed where approximately located; short dashed where inferred; dotted where concealed

Fault
Long dashed where approximately located; short dashed where inferred; dotted where concealed; queried where doubtful. U, upthrown side; D, downthrown side; arrows show relative movement

Thrust fault
Dashed where approximately located; dotted where concealed; queried where doubtful. T on upper plate

Anticline
Dashed where approximately located, dotted where concealed

Overturned anticline
Dashed where approximately located; dotted where concealed; shows crestline of Boulder Creek anticline north of Deer Creek

Syncline
Dashed where approximately located; dotted where concealed

Overturned syncline
Dashed where approximately located; dotted where concealed

Strike and dip of beds
Symbol on right used where top of bed can be distinguished

Strike and dip of overturned beds
Symbol on right used where top of bed can be distinguished

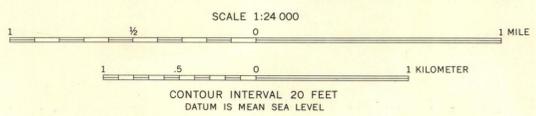
Strike and dip of vertical beds
Symbol on right used where top of bed can be distinguished

Strike and dip of beds overturned through more than 180°
Symbol on right used where top of bed can be distinguished

Limit of outcrop

APPROXIMATE MEAN ELEVATION, 1953

GEOLOGIC MAP OF THE SNOWDRIFT MOUNTAIN QUADRANGLE, BEAR LAKE AND CARIBOU COUNTIES, IDAHO



Base map by Topographic Division, U.S. Geological Survey, 1951
Interior—Geological Survey, Washington, D.C.—61450 R. 45 E. R. 46 E. 111°07'30" 42°30' 111°15' 42°37'30"
Geology mapped in 1953 and 1955 by E. R. Cressman