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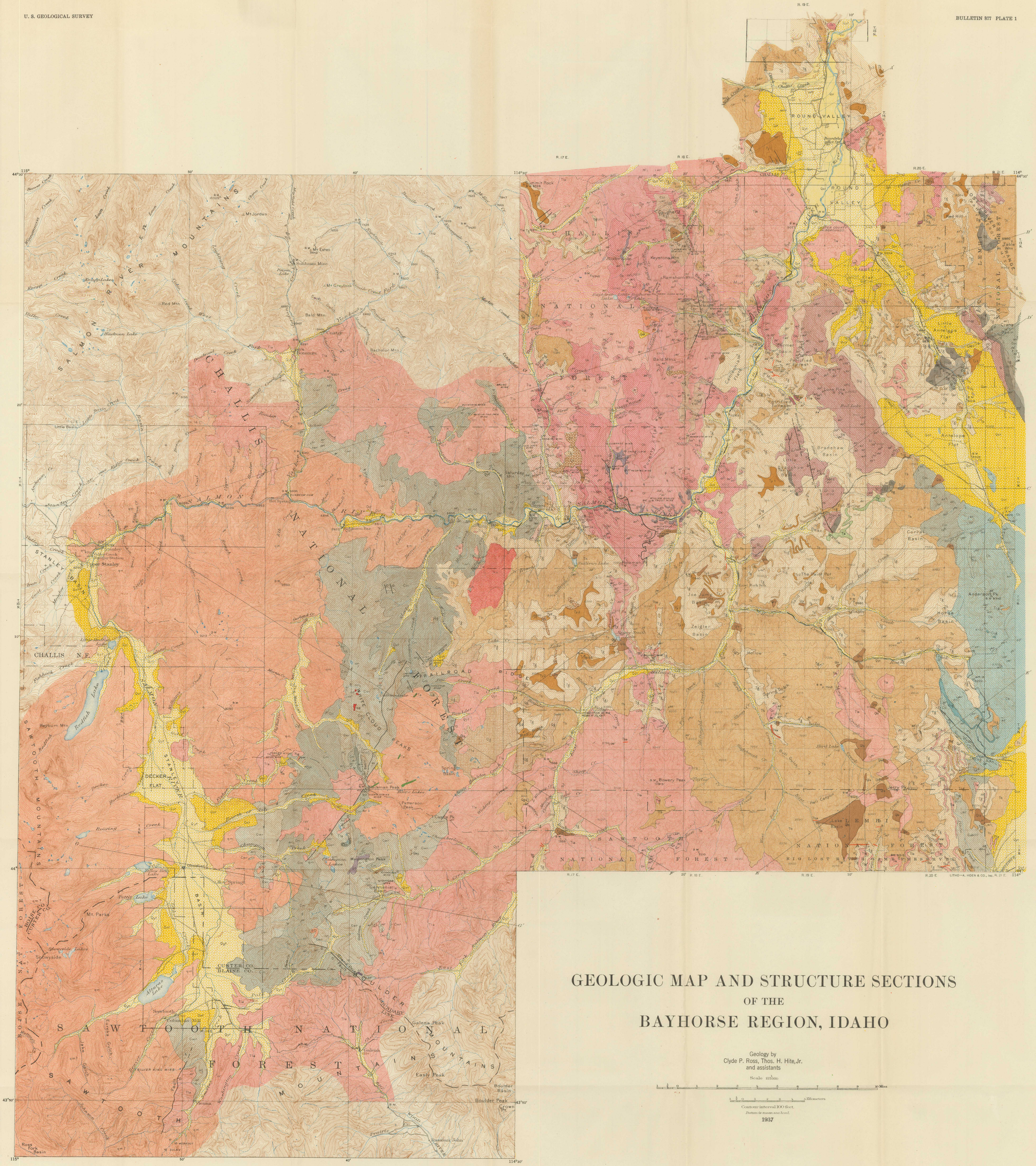
OHIO STATE UNIVERSITY.



GEOLOGIC MAP AND STRUCTURE SECTIONS
OF THE
BAYHORSE REGION, IDAHO

Geology by
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and assistants

Scale 1:62500

Contour interval 100 feet.
Datum is mean sea level.

1937

EXPLANATION

SURFICIAL DEPOSITS

QUATERNARY

Recent

- **Talus glaciers** (Conspicuous talus masses which have crept down hill)
- **Landslides** (Areas in which masses of bedrock have broken and slipped down)
- **Flood-plain alluvium** (Mapped only in Round Valley; similar to deposits in channels and inner porges of other streams)

Pleistocene

- **Younger alluvium** (Gravel and sand bordering present streams)
- **Older alluvium** (Includes deposits on upper terraces, transported material from the old glacial deposits, and silt, especially on the borders of Stanley Basin, Wisconsin morainal deposits)
- **Glacial deposits** (Mainly coarse gravel of glacial origin of early Pleistocene age; the deposits are modified in surface form)

BEDDED ROCKS

TERTIARY

Late Oligocene or Early Miocene

Challis volcanics

- **Basalt** (Flows of dark basaltic and calcic andesite at different horizons)
- **Yankee Fork rhyolite member** (Ty 1, lithoidal rhyolite with smoky quartz phenocrysts; Ty 2, lithoidal rhyolite of light color; Ty 3, dark glassy rhyolite)
- **Gerner tuffaceous member** (Mainly lightcolored, in part bedded tuff; intercalated conglomerate with tuffaceous and siliceous cement (Tcg) mapped separately where scale permits)
- **Travertine** (Deposits of calcium carbonate, in part bedded)
- **Latite-andesite member** (Flows and pyroclastics, mainly of intermediate composition)
- **Undifferentiated Challis volcanics**

UNCONFORMITY

CARBONIFEROUS

Pennsylvanian

- **Wood River formation** (Mainly argillaceous and calcareous quartzite; some limestone; basal conglomerate (Cbc) locally)

Mississippian

- **Brazer limestone** (With intercalated conglomerate (Ccg) and chert (Cch); limestone is more or less dolomitic; only the larger masses of chert are mapped)
- **Milligen formation** (Argillite, commonly carbonaceous; argillaceous quartzite, dolomite, and conglomerate locally)

DEVONIAN

Upper Devonian

- **Grand View dolomite** (Moderately dark, well bedded dolomite; in part quartzitic)

Middle Devonian

- **Jefferson dolomite** (Dark thick-bedded dolomite)

SILURIAN

- **Laketown dolomite** (With intercalated quartzite (Slq) mainly at base; moderately light-colored, bedded dolomite; quartzite is nearly white and is part impure)
- **Trail Creek formation** (Brownish-gray calcareous shale with some quartzite)

ORDOVICIAN

Upper Ordovician

- **Saturday Mountain formation** (Massive dark dolomite interbedded with argillite and shaly dolomite; some beds highly carbonaceous)

Middle (?) Ordovician

- **Kinnikinic quartzite** (With intercalated dolomitic limestone (Ok); massive light-colored quartzite with lenses of dolomite, dolomitic shale, and locally some conglomerate not shown on map)

Lower Ordovician

- **Ramshorn slate** (With basal conglomerate, (Orc); Mainly slate, some argillite and argillaceous quartzite; quartz conglomerate locally mapped at base; minor lenses of conglomerate not mapped separately)

UNCONFORMITY

CAMBRIAN (?)

- **Bayhorse dolomite** (Thick-bedded dolomite, in part oolitic)
- **Garden Creek phyllite** (Dark sheared argillaceous rock)

INTRUSIVE ROCKS

TERTIARY

Miocene or Oligocene

- **Basalt and augite andesite dikes** (Dark rocks, commonly with inconspicuous phenocrysts)
- **Biotite andesite dike** (Fine-grained, rather light-colored porphyry)
- **Augite syenite** (Moderately coarse pinkish-gray rock with fanlike augite phenocrysts)

Late Jurassic or Cretaceous

- **Aplite** (One isolated body on Grand Prize Creek)
- **Quartz monzonite** (Granite rock of the Idaho batholith, and similar rocks in outlying stocks)
- **Granodiorite** (More calcic than much of the Idaho batholith but probably closely related thereto)
- **Quartz diorite** (Found in marginal parts of the Idaho batholith and its outliers)
- **Calcic quartz diorite** (Small isolated masses; ages not determined)
- **Gabbro** (Hydrothermally altered dark-green to black rock; age not determined)

Normal fault (D, downthrown side)

Overthrust fault (T, overthrust side)

Strike and dip of beds

Strike and dip of overturned beds

Strike of vertical beds

Horizontal beds

Mine