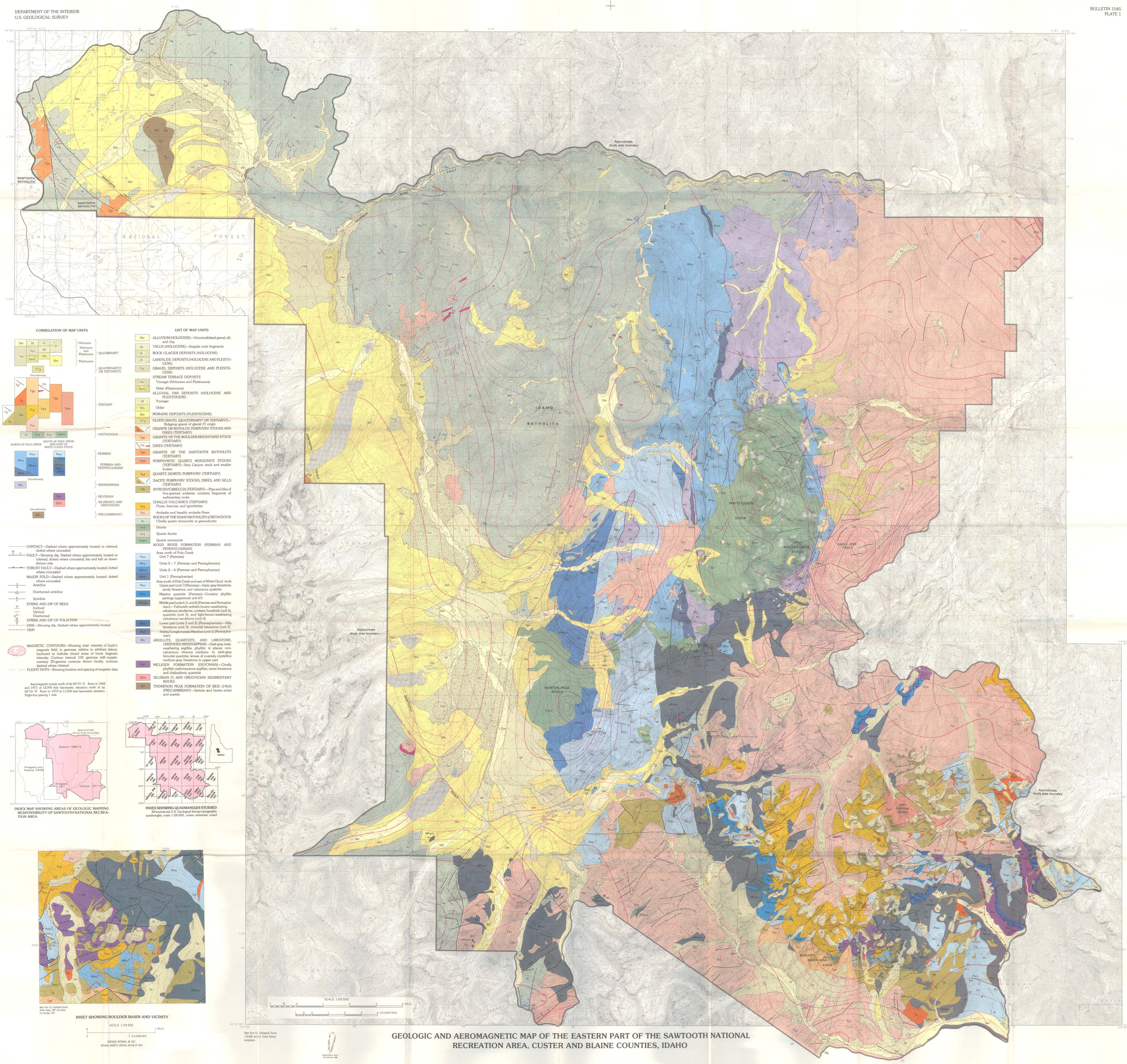

CORRELATION OF MAP UNITS

LIST OF MAP UNITS

- **Qal** — ALLUVIUM (HOLOCENE)—Unconsolidated gravel, silt, and clay
- **Qt** — TALUS (HOLOCENE)—Angular rock fragments
- **Qr** — ROCK GLACIER DEPOSITS (HOLOCENE)
- **Qls** — LANDSLIDE DEPOSITS (HOLOCENE AND PLEISTOCENE)
- **Qg** — GRAVEL DEPOSITS (HOLOCENE AND PLEISTOCENE)
- STREAM TERRACE DEPOSITS
  - **Qat** — Younger (Holocene and Pleistocene)
  - **Qath** — Older (Pleistocene)
- ALLUVIAL FAN DEPOSITS (HOLOCENE AND PLEISTOCENE)
  - **Qf** — Younger
  - **Qfo** — Older
- **Qm** — MORAINE DEPOSITS (PLEISTOCENE)
- **QTg** — OLDER GRAVEL (QUATERNARY? OR TERTIARY?)—Ridgetop gravel of glacial (?) origin
- **Tg** — GRANITE OR RHYOLITE PORPHYRY STOCKS AND DIKES (TERTIARY)
- **Tgb** — GRANITE OF THE BOULDER MOUNTAINS STOCK (TERTIARY)
- **Td** — DIKES (TERTIARY)
- **Tgs** — GRANITE OF THE SAWTOOTH BATHOLITH (TERTIARY)
- **Tqm** — PORPHYRITIC QUARTZ MONZONITE STOCKS (TERTIARY)—Ibex Canyon stock and smaller bodies
- **Tqd** — QUARTZ DIORITE PORPHYRY (TERTIARY)
- **Tp** — DACITE PORPHYRY STOCKS, DIKES, AND SILLS (TERTIARY)
- **Tib** — INTRUSIVE BRECCIA (TERTIARY)—Pipe and dike of fine-grained andesite; contains fragments of sedimentary rocks
- CHALLIS VOLCANICS (TERTIARY)
  - **Tca** — Flows, breccias, and ignimbrites
  - **Tcv** — Andesite and basaltic andesite flows
- ROCKS OF THE IDAHO BATHOLITH (CRETACEOUS)
  - Chiefly quartz monzonite or granodiorite
  - **Ki** — Diorite
  - **Kid** — Quartz diorite
  - **Kiq** — Quartz monzonite
  - **Kiqm**
- WOOD RIVER FORMATION (PERMIAN AND PENNSYLVANIAN)
  - Area north of Pole Creek
    - **Pwu** — Unit 7 (Permian)
    - **PPw** — Units 2 – 7 (Permian and Pennsylvanian)
    - **PPwa** — Units 2 – 6 (Permian and Pennsylvanian)
    - **Pwh** — Unit 1 (Pennsylvanian)
  - Area south of Pole Creek and east of White Cloud stock
    - **Pwu** — Upper part (unit 7)(Permian)—Dark-gray limestone, sandy limestone, and calcareous quartzite
    - **Pwq** — Massive quartzite (Permian)—Contains phyllitic partings (uppermost unit 6?)
    - **PPwm** — Middle part (units 6, 5, and 4) (Permian and Pennsylvanian)—Yellowish-reddish-brown-weathering calcareous sandstone, contains fusulinids (unit 6), quartzite (unit 5), and light-brown-weathering calcareous sandstone (unit 4)
    - **PPwl** — Lower part (units 3 and 2) (Pennsylvanian)—Silty limestone (unit 3), crinoidal limestone (unit 2)
    - **PPwh** — Hailey Conglomerate Member (unit 1) (Pennsylvanian)
- **Mu** — ARGILLITE, QUARTZITE, AND LIMESTONE, UNDIVIDED (MISSISSIPPIAN)—Dark-gray rusty-weathering argillite, phyllitic in places; noncalcareous vitreous medium- to dark-gray bimodal quartzite; lenses of coarsely crystalline medium-gray limestone in upper part
- **Dm** — MILLIGEN FORMATION (DEVONIAN)—Chiefly phyllitic carbonaceous argillite; some limestone and chalcedonic quartzite
- **SOu** — SILURIAN (?) AND ORDOVICIAN SEDIMENTARY ROCKS
- **pCt** — THOMPSON PEAK FORMATION OF REID (1963) (PRECAMBRIAN?)—Sericite and biotite schist and marble

CONTACT—Dashed where approximately located or inferred; dotted where concealed

FAULT—Showing dip. Dashed where approximately located or inferred; dotted where concealed; bar and ball on downthrown side

THRUST FAULT—Dashed where approximately located; dotted where concealed

MAJOR FOLD—Dashed where approximately located; dotted where concealed

- Anticline
- Overturned anticline
- Syncline

STRIKE AND DIP OF BEDS

- Inclined
- Vertical
- Overturned

STRIKE AND DIP OF FOLIATION

DIKE—Showing dip. Dashed where approximately located

VEIN

MAGNETIC CONTOURS—Showing total intensity of Earth's magnetic field, in gammas, relative to arbitrary datum; hachured to indicate closed areas of lower magnetic intensity. Contour interval 100 gammas with supplementary 20-gamma contours shown locally; contours dashed where inferred

FLIGHT PATH—Showing location and spacing of magnetic data

Aeromagnetic survey south of lat 44°15′ N. flown in 1968 and 1971 at 12,000 feet barometric elevation; north of lat 44°15′ N. flown in 1972 at 11,000 feet barometric elevation. Flight-line spacing 1 mile

INDEX MAP SHOWING AREAS OF GEOLOGIC MAPPING RESPONSIBILITY OF SAWTOOTH NATIONAL RECREATION AREA

INDEX SHOWING QUADRANGLES STUDIED

All sources are U.S. Geological Survey topographic quadrangles, scale 1:24,000, unless otherwise noted

Base from U.S. Geological Survey Antler Lakes, 1962 and Easley Hot Springs, 1973

INSET SHOWING BOULDER BASIN AND VICINITY

SCALE 1:24 000

1 MILE

1 KILOMETER

CONTOUR INTERVAL 40 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Base from U.S. Geological Survey 1:24,000 and U.S. Forest Service compilation

APPROXIMATE MEAN DECLINATION, 1980

GEOLOGIC AND AEROMAGNETIC MAP OF THE EASTERN PART OF THE SAWTOOTH NATIONAL RECREATION AREA, CUSTER AND BLAINE COUNTIES, IDAHO