

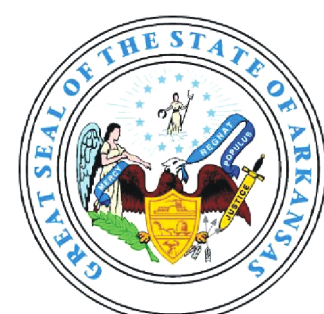
GEOLOGIC MAP OF THE EAGLE MOUNTAIN QUADRANGLE, POLK COUNTY, ARKANSAS



Geology by Boyd R. Haley and Charles G. Stone
1994

Edited by William D. Hanson
Digital Compilation by Nathan H. Taylor
2007

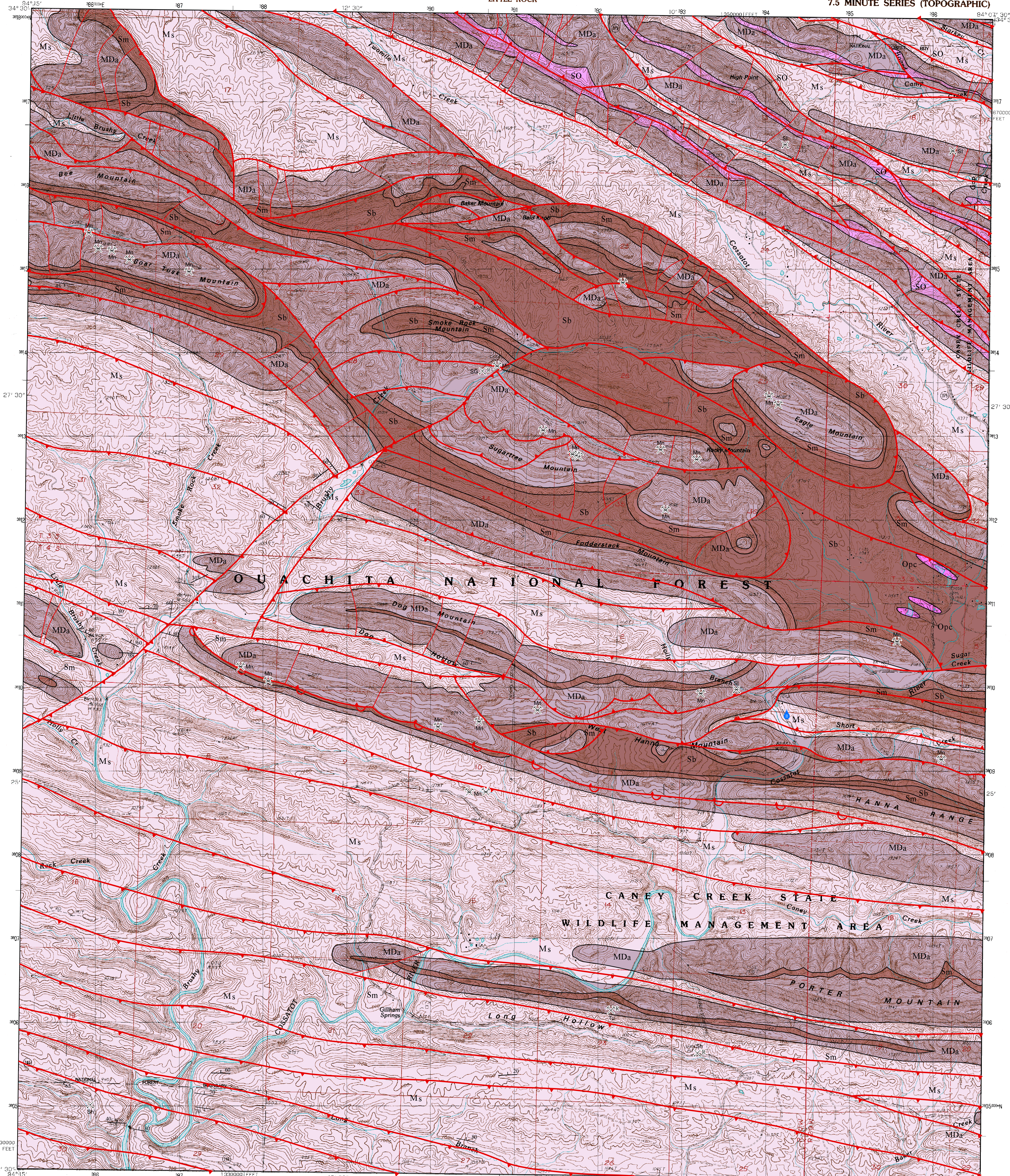
Arkansas Geological Survey, Bekki White, State Geologist



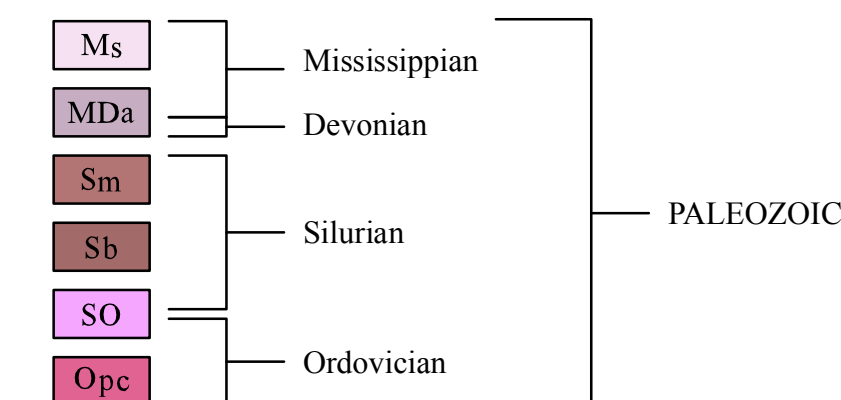
STATE OF ARKANSAS
GEOLOGICAL COMMISSION
LITTLE ROCK

EAGLE MOUNTAIN QUADRANGLE
ARKANSAS-POLK CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



Correlation of Map Units



Description of Map Units

- Ms** **Stanley Formation (Mississippian)** - The Stanley is composed predominantly of grayish-black to brownish-gray shale, with lesser amounts of thin to massive-bedded, fine-grained, gray to brownish-gray feldspathic sandstone and black chert. Weathered shale is olive-gray, and the sandstone is generally more porous and brown. Most of the Stanley is Late Mississippian (Chesterian) as indicated by conodonts and plant fossils. The formation was deposited in a deep marine environment.
- MDa** **Arkansas Novaculite (Mississippian-Devonian)** - Three divisions of the novaculite are recognized in the state. The Lower Division is white massive-bedded novaculite with some interbedded gray shales near its base. The Middle Division is greenish to dark-gray shales interbedded with many thin beds of dark novaculite. The Upper Division is white, thick-bedded, and often calcareous. The formation was deposited in a deep marine environment.
- Sm** **Missouri Mountain Formation (Silurian)** - The Missouri Mountain consists of shale interbedded with conglomerate, novaculite, and sandstone. Few identifiable fossils have been recovered from this unit. The unit was deposited in a deep marine environment.
- Sb** **Blaylock Formation (Silurian)** - The Blaylock consists of tan to gray, fine to medium sandstone interbedded with black fissile shale. Graptolite and trace fossils may be found, but are rare. The unit was deposited in a deep marine environment.
- SO** **Missouri Mountain Formation (Silurian)** - The Missouri Mountain consists of shale interbedded with conglomerate, novaculite, and sandstone. Few identifiable fossils have been recovered from this unit. The unit was deposited in a deep marine environment.
- Opc** **Polk Creek Formation (Ordovician)** - The Polk Creek rocks are black, sooty, fissile, shale with minor black chert traces of gray quartzite and limestone. Graptolites are common in most of the shales in the formation.

Symbols

- Contact
- Thrust Fault
- Overturned Thrust Fault
- Tear Fault
- Strike and Dip
- Pit
- Abandoned Pit
- Abandoned Mine/Quarry
- Reclaimed Pit
- Reclaimed Mine/Quarry

Mineral Commodities

- Mn Manganese
- SG Sand and Gravel
- sh Shale
- sl Slate
- Tu Turquoise
- Bottled Water Source

References

- Haley, B. R., and Stone, C. G., 1972, Geologic Worksheet of the Umpire Quadrangle, Arkansas Geological Commission, Open-file Report, scale 1:62,500.
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- McFarland, J. D., 2004, Stratigraphic Summary of Arkansas: Arkansas Geological Commission Information Circular 36, 39p.
- Miser, H. D., and Purdue, A. H., 1929, Geology of the DeQueen and Caddo Gap Quadrangles, Arkansas: U.S. Geological Survey, Bulletin 808, 195p., scale 1:125,000.

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CONTROL BY USGS AND NOS/NOMA
COMPILED FROM AERIAL PHOTOGRAPHS TAKEN 1982
FIELD CHECKED 1984. MAP EDITED 1986
PROJECTION LAMBERT CONFORMAL CONIC
GRID: 1000-METER UNIVERSAL TRANSVERSE MERCATOR ZONE 15
HORIZONTAL DATUM NATIONAL GEODETIC DATUM OF 1983
VERTICAL DATUM NATIONAL GEODETIC DATUM OF 1983
UTM GRID DECLINATION 0° 00' WEST
1983 MAGNETIC NORTH DECLINATION 2° 30' WEST
To place on the predicted North American Datum of 1983,
move the projection lines as shown by dashed corner ticks
(7 meters south and 18 meters east)
There may be private inholdings within the boundaries of any
Federal and State reservations shown on this map.
No distinction made between houses, barns, and other buildings

PROVISIONAL MAP
Produced from original
manuscript drawings. Informa-
tion shown as of date of
photography.

SCALE 1:24 000
MILES
KILOMETERS
CONTOUR INTERVAL 20 FEET
OTHER ELEVATIONS SHOWN TO THE NEAREST 0.1 FOOT
TO CONVERT FEET TO METERS MULTIPLY BY 0.3048
TO CONVERT METERS TO FEET MULTIPLY BY 3.2808
THIS MAP COMPLES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
AND ARKANSAS GEOLOGICAL COMMISSION, LITTLE ROCK, ARKANSAS 72204

ROAD LEGEND

- Unimproved Road
- Interstate Route
- U.S. Route
- State Route

EAGLE MOUNTAIN, ARKANSAS
PROVISIONAL EDITION 1986
34094-D2-TF-024

1	2	3	1 Pottery
2	3	4	2 Mines
3	4	5	3 Board Camp
4	5	6	4 Vandalism
5	6	7	5 Nicholas Mountain
6	7	8	6 Wickes
7	8		7 Baker Springs
8			8 Umpire

ADJOINING 7.5' QUADRANGLE NAMES

Funded by the United States Geological Survey in cooperation
with the Arkansas Geological Commission, under
the COGEO Map Project

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